

# MARINE RECORD

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To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interests of Lake Carriers, and improve the character of the service rendered to the public.

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### THE FLAG AND THE CARGO.

The Baltimore Chamber of Commerce recently became interested in the subject of the status of American shipping in case of war with Spain. Accordingly the question was propounded, "Does the flag of a ship protect its cargo?" and was submitted to a prominent law firm for a legal opinion, as follows:

"1. In the event of war all citizen and subjects of our own country and of Spain, respectively, and all foreigners domiciled in either country, will be, in contemplation of law, enemies to each other. Business and commercial intercourse between them must cease, and it will be illegal to perform existing contracts or engagement or to make new ones.

"2. Neither the United States nor Spain was originally, or has since, become a party to the declaration of Paris, by which those powers which in 1856 originally made that declaration, and those which have subsequently assented to it, undertook to abolish privateering.

"Therefore, if war is declared, our commerce will be liable to encounter not only the public armed vessels, but also the privateers of Spain.

"3. The coastwise commerce between the different parts of the United States is, by its laws, open only to vessels of the United States, foreign vessels being prohibited from taking part in it.

"All vessels, therefore, engaged in our coastwise commerce would be liable to capture by Spanish men-of-war or privateers, and to condemnation, with all goods on board belonging to citizens of this country or to foreigners domiciled here, as prize of war.

### WAR RISK INSURANCE.

"Insurance on such vessels and their cargoes should, therefore, include war risk.

"The same considerations would apply to United States vessels on foreign voyages, and to all goods on board belonging to citizens of this country or to foreigners domiciled here.

"Captured vessels, under 3 and 4, and such cargoes, would be taken into Spanish ports for condemnation.

"6. All Spanish vessels and goods on such vessels belonging to subjects of Spain or to foreigners domiciled in Spain, or in any of her colonies, would be liable to capture by men-of-war or privateers of the United States, and to condemnation in courts of this country as prize of war.

"7. In our opinion, by virtue of the treaties entered into in 1795 and in 1819 between the United States and Spain, and especially the declarations contained in Article XV of the first-mentioned and in Article XII of the last-mentioned treaty, and the provisions of those articles, respectively, both the United States and Spain are committed to the principle that the neutral flag covers enemy's goods, with the exception of contraband of war.

### THE FLAG DEFINES THE CARGO.

"Article XII, above referred to, of the treaty of 1819 provides, 'with respect to the fifteenth article of the same treaty of friendship, limits and navigation of 1795, in which is stipulated that the flag shall cover the property, the two high contracting parties agree that this shall be so understood with respect to those powers who recognize this principle.'

"The principle so defined and declared by the United States and Spain is, in substance, Article II of the declaration of Paris, referred to above, and has been recognized by the adherence to that declaration of all powers of the civilized world except three.

"It is true that those exceptions are the United States, Spain and Mexico; but, independently of the declaration of Paris; and long before it, as already shown, the United States and Spain recognized and declared the principle and made it the subject of treaty, and since then all other nations have followed their example by also solemnly declaring it.

"We think, therefore, that Spain is, as matter of law, bound to respect that principle, and also that self-interest will prevent her from defying the world by attempting to interfere with cargoes and contraband of war belonging to citizens of the United States in neutral vessels.

### CONTRABAND OF WAR.

"8. Contraband of war has been defined by the Supreme Court of the United States in the case of the *Peterhoff*, 5 Wall, 28, as follows:

"The classification of goods as contraband or not contraband has much perplexed text writers and jurists. A strictly accurate and satisfactory classification is, perhaps, impracticable, but that which is best supported by American and English decisions may be said to divide all merchandise into three classes. Of these classes, the first consists of articles manufactured and primarily and ordinarily used for military purposes in time of war; the second, of articles which may be or are in use for the purpose of war or peace, according to circumstances, and the third of articles exclusively used for peaceful purposes. Lawrence's *Wheat*, 772, 776, note; *The Commercen* 1 *Wheat*, 382; *Dana Wheat*, 629, note; *Pars. Mar. Law* 93, 94. Merchandise of the first class destined to a belligerent country or places occupied by the army or navy of a belligerent is always contraband; merchandise of the second class is contraband only when actually destined to the military or naval use of a belligerent, while merchandise of the third class is not contraband at all, though liable to seizure and condemnation for violation of the blockade or siege.

"9. If in any particular case it is thought advisable to avoid the possibility of danger to cargo in a neutral vessel—growing out of a repudiation or disregard by Spain or any

of her armed vessels of her obligations, as we understand them—it should not, in our opinion, be either difficult or costly, in view of the foregoing considerations, to obtain insurance covering war risk.

### THE EFFECT OF BLOCKADE.

"10. We have not herein discussed what would be the effect and result of a blockade, because that emergency has not been presented and may not arise, even if there is war, and we do not wish to confuse this opinion by qualifications which are for the present at least unnecessary.

"11. It remains only to suggest that while the present method of conducting the grain export business does not divest the ownership so as to make it neutral property during the voyage, it would be possible by absolute sale, full payment and transfer of title, to make the grain the property of the neutral on this side, before the voyage is begun. But such sale and transfer must be bona fide, and unqualified, to give protection to the neutral."

### AMERICAN IRON ORE FOR SOUTH WALES.

Daniel F. Philips, U. S. Consul at Cardiff, South Wales, says: It has been freely rumored here and in the United States, as I am informed, that 4,000,000 tons of American iron ore have been purchased for delivery at Cardiff. The quantity would seem to be an exaggeration to start with, and the name of Sir Lowthian Bell as the purchaser could hardly be correct, as his interest in iron and steel industries is confined to the north of England. But this much is certain, the local iron and steel firms, notably the Dowlais Iron Company, are somewhat exercised as to the adequate future supplies of ore. The Spanish supplies, upon which these firms are entirely dependent, are continually becoming poorer in quality, to say nothing of the uncertainty as to quantity. This information I have on the best authority. Quite recently, two sample cargoes have been imported from Cuba by the Dowlais Iron Company, and I have been privately informed of a recent visit having been paid to a country adjacent to Spain for the purpose of testing ores. Of my own knowledge, I may say that there is practically no limit to the quantity of iron ore for which demand may be found in this district. What is required is a good lumpy ore in what is termed "mechanical" condition, with a high percentage of iron, delivered in Cardiff and the other Welsh ports at marketable rates. As to the actual quotations, these will depend upon freight rates to a great extent; but, on general grounds, it may be argued that if ore could be brought here from Cuba at a payable price when freight rates were exceptionally high, surely there is a possibility of importing with advantage from the United States.

The new vessels purchased for the navy are being rapidly rechristened. The revenue cutter *Algonquin* has been rechristened the *Accomac*. The *Mayflower*, recently of the light-house service, will in the future be officially known as the *Suwanee*. The yacht *Sovereign* is to be called the *Scorpion*, and the *Creole*, intended for use as a hospital ship, the *Solace*. The capital city of Kansas will be honored by having the recently purchased gunboat, *Diogenes*, named *Topeka*. The small unnamed torpedo boat purchased in England is to be called the *Manley*, in honor of Capt. John Manley, of revolutionary fame. The *Saturn* will retain her name for the present. The *Yankee* will be the *El Norte* and the *Dixie* the *El Sud* of the Morgan line, which were purchased a few days ago. It is proposed to name the *El Rio* and *El Monte* the *Prairie* and *Yosemite*. There has been considerable opposition to the purchase of the *St. Louis* and *St. Paul*, primarily because of their great cost. The officers and crews of the *St. Louis* are reported to have volunteered to remain on her in the event that she was mustered into the naval service. The department is considering a proposition to give acting appointments to officers of the Morgan line and other vessels purchased for use as auxiliary cruisers.



## NEWS AROUND THE LAKES.

## CHICAGO.

*Special Correspondence to the Marine Record.*

A. L. Fitch chartered the steamer John Owen for oats to Buffalo at 1 cent.

Capt. John Prindiville chartered the steamer O. K. Flint for corn to Erie at 1 1/8 cents.

The fleet of lumber carrying schooners are fitting out. Several have already left port.

The steamer Madagascar had her high pressure cylinder broken when getting away from her dock last week.

The schooner Jessie L. Boyce has been sold by Jonathan Boyce, of Bay City, Mich., to Captain Ole Christensen, of Chicago.

J. L. Higgle Jr., receiver for the Vessel Owners' Towing Co., has sold the tug J. V. Taylor to Capt. Geo. Weaver, of Charlevoix, Mich.

H. W. Cook & Co., vessel agents, have removed from room 2, No. 12 Sherman street, to room 7, No. 6 Sherman street, Wheeler Building.

At the Independent Tug Line floating dry dock the tug E. P. Ferry is in for a general overhauling. The tug W. L. Ewing was in for general repairs.

Porter Bros., contractors of Duluth, are here fitting out the tug A. A. Carpenter, purchased from the V. O. T. Co.'s receiver last fall. They will take her to Duluth.

At Miller Brothers the steamer City of Cleveland is in dock for calking butts, repairs to stern bearing, a new wheel key and some general repairs; the tug Commodore was in and received a new wheel.

Capt. Chas. H. Wallace has been appointed salesman for the Youghiogheny and Lehigh Coal Co., who have recently fitted up an extensive coal dock at the north and east ends of the light-house slip, where they will carry on the business of fueling vessels.

The boiler of the steamer Philip Minch burst open when it was being tested by the local inspector at this port last week. The underwriters will pay for a new boiler, or their share of it, as the insurance policy is said to cover everything and the survey had been made on her.

Capt. Dunham, president of the Lake Carriers' Association, has received a letter from Supt. Thompson of the Welland canal, which stated that the canal would not be opened until April 25th, this was in response to an appeal from vesselmen, desiring an earlier opening.

At the Chicago Ship Building Co.'s ship yard the steamer Iron Age, grain laden, was in dock and had her wheel fastened. The car ferry steamer Ann Arbor No. 2 is in dock for a new wheel and shaft. The steamer S. J. Murphy is receiving some new plates on her bow, new bulk heads and other repairs.

Barry's Independent Tug Line towed the steamer Iron Age to the Chicago Ship Building Co.'s dry dock at South Chicago, the barge Scotia to the Keith elevator, the steamer R. E. Schuck to the Union elevator, the steamer Penobscot to the City elevator, the steamer E. C. Pope to the Alton elevator, the steamer Oceanica to the Galena elevator to load grain, the steamer City of Cleveland to Miller Brothers' dry dock.

A meeting of the Lumber Carriers' Association was held last Friday afternoon at the Le Grand hotel hall. The meeting was a very satisfactory one and considerable more tonnage was added to the association. Some alterations were made in the tariff as follows: On mill cuts, one shilling extra M. feet, nothing extra is to be charged, and full load of shorts two shillings extra per M. over straight loads was altered to "hold full." Timber from the water four shillings extra per M. feet freight, was altered to two shillings.

Traffic officials of the lines interested in flour and grain traffic from St. Paul and Minneapolis to the east met Tuesday at the Auditorium Hotel and agreed to reduce the rate on those articles from Minneapolis to the Atlantic seaboard to the basis of 25 cents a hundred pounds by all-rail lines and 22 cents by lake and rail lines. This is a reduction of 2 1/2 cents. No action will be taken by the east bound roads from Chicago until the Joint Traffic Association has acted upon the recommendation of the Central Freight Association to make grain and its products 15 cents from Chicago to New York.

The Dunham Towing Co. towed the steamer Bulgaria to the Iowa and St. Paul elevators, steamer Helena to Armour's C elevator, steamer Yale to the City elevator, steamer City of Venice to Armour's D elevator, steamer John Plankinton to the St. Paul City and Union elevators, steamer Neosho to Armour's C elevator, steamer W. M. Egan to the Santa Fe and Union elevators, steamer Senator to the St. Paul elevator, steamer T. Davidson to Armour's C elevator, steamer R. P. Fitzgerald to the Alton elevator, steamer Commodore to Armour's D elevator and steamer John Owen to Armour's D elevator.

Secretary Higgle, of the new Lumber Carriers' Association, announces that a sufficient amount of the lumber carrying tonnage has been enrolled in the association to make its agreement to maintain a fixed tariff of rates effective. No boats are now being chartered at less than the association rates. In consequence the lumber fleet is very slow in going into service, but vessel owners are content to let their boats remain in idleness rather than accept less than the agreed rates. A meeting will be held on Friday, at which time the

association will be put into working order. The advance in freight rates is about 12 1/2 cents per 1,000 feet.

The stocks of grain in Chicago elevators last Saturday evening were 6,603,000 bushels of wheat, 19,031,000 bushels of corn, 1,197,000 bushels of oats, 702,000 bushels of rye, and 323,000 bushels of barley. Total, 27,855,000 bushels of all kinds of grain, against 30,327,000 bushels a year ago. For the same date the secretary of the Chicago Board of Trade states the visible supply of grain in the United States and Canada as 30,129,000 bushels of wheat, 40,100,000 bushels of corn, 13,540,000 bushels of oats, 3,511,000 bushels of rye, and 1,137,000 bushels of barley. These figures are larger than the corresponding ones of a week ago by 1,493,000 bushels of oats and 308,000 bushels of rye. They are smaller by 94,000 bushels of wheat, 3,547,000 bushels of corn, and 36,000 bushels of barley. The visible supply of wheat for the corresponding week of a year ago increased 6,000 bushels. Grain freights are steady on the basis of 1 1/8 cents on corn to Buffalo.

## PORT HURON.

*Special Correspondence to The Marine Record.*

John Safe, light-keeper at Horseshoe range, has been transferred to Sandusky.

The owners of the sunken passenger steamer Cambria have succeeded in pumping her out and will take her to Kingston as soon as the Welland canal is open.

McDonald & Nicholson, of Duluth, have purchased the tug F. N. Stanwood from Thompson & Lynn. They will take the Stanwood to Duluth to do log towing.

James J. Lynn has sold his interest in the Thompson tug line to C. D. Thompson. This line will have the powerful tug Boynton stationed at the dyke in the "Soo" this season.

Four more steamers and eight consorts were added to the list of the Lumber Carriers' Association this week making a total of 197 vessels enrolled. The Lake Michigan lumber carriers will meet at Chicago today to act upon entering the association.

Owing to the completion of the deep-water channel between Port Huron and Detroit, reports of vessel passages at Port Huron are discontinued. There seemed to be no longer any necessity for burdening the columns of newspapers with more than one report between Lake Erie and Lake Huron, and Detroit, apparently, suits the larger number of newspapers. It was accordingly selected. All general marine news from Port Huron will be covered as in the past. Passages only will be omitted from the report.

Something new in the running of lumber tows will be attempted the coming season. Heretofore the Curtis tow has been kept intact but now it is intended to keep one of the barges loading at the dock in Georgian Bay, one unloading at Black Rock and the steamer towing the third between the two points. The tow, which is owned by the old firm of Holland, Graves & Montgomery, consists of the steamer Curtis and barges Fassett, Holland and Reed. The idea is to keep the lumber moving continuously from the saw to the piling yards at Black Rock. Such was formerly the custom on Lake Michigan.

Capt. W. A. Collier, C. E. Grover, M. A. Bradley and other Cleveland vesselmen have bought the steamers Badger State and Empire State from the Detroit Dry Dock Company. They will be operated between Toledo and Ogdensburg under a corporate management to be known as the Northern Transportation Company. The price paid for the steamers was about \$15,000 each. The Badger State was built at Buffalo in 1862, and the Empire State came out the following year. She was also built at Buffalo. They were the property of the Western Transit Company until last fall, when the Detroit Dry Dock Company took them in a trade in connection with the contract for a large steel steamer which is being built at Detroit for the Western line. Repairs are being made on the steamer, and they will be put on the Toledo-Ogdensburg route as soon as the work is completed.

## DETROIT.

*Special Correspondence to The Marine Record.*

Clarence L. Parker says the retail lumber dealers have nothing to kick at, as the association rates have been placed at just as low a rate as possible.

Steamers coming into Grosse Point channel from Lake St. Clair, are having considerable trouble in getting a good range with the present lights. Complaint having been made the matter will no doubt be looked into and promptly regulated.

Judge Swan has filed a decree sustaining the finding of the United States Circuit Court Commissioner Davidson, who decided the amount of damages in the case of Thomas S. Lester, libellant, against the tugs Sweepstakes and Sumner. There was an appeal from the report of the commissioner. The decision finds the tugs guilty of negligence and the damages amount to nearly \$500. A final decree will follow shortly in favor of the libellant.

The Detroit Lumber Dealers' Association met this week to consider the action of Lumber Carriers' Association in making vessel rates to Detroit the same as Ohio ports, which is a raise of 12 1/2 c. to 25 c. per thousand feet over the rates of 1897. This rate they hold is a discrimination against Detroit. They also discussed the new rates of the Longshoremen's Association, in which there are some increases. Harry C. Barter was present and assured the lumber dealers that the association he represented was ready and willing to do the fair thing. A committee was appointed to confer with the Lumber Carriers' Association and the International Long-

shoremen's Association and see if some agreement could not be reached.

Work at the Wyandotte yards of the Detroit dry dock upon the new steel steamer for the Western Transit Co., is now well along. The new boat is expected to be ready for business between the 15th of June and July 1. The new steamer will be 400 feet in length, 45 1/2 feet beam and 28 feet molded depth. She will have six gangways on each side, five compartments for stowage of freight in the hold, with eleven hatches on main deck and nine on her spar deck. Her coal will be carried on her spar deck. She will have two steel masts and two complete electric lighting plants, entirely independent of each other. Two large hoisting engines for loading and removing cargo will be put in. In fact, her whole complement will be of the most approved modern character. Her main engines will be of the quadruple expansion type; with cylinders of 19, 27 1/2, 40 and 58-inch diameter, and 42-inch stroke. They will be given three Scotch type boilers 11 feet in diameter and 11 feet 6 inches in length, with a working pressure of 210 pounds of steam. The new craft will have a carrying capacity of 5,000 tons, and is guaranteed to make thirteen miles an hour when fully loaded.

The Detroit harbor of the American Association of Masters and Pilots of Steam Vessels was organized only last season with ten charter members and it has now forty-eight members in good standing and is progressing a very satisfactory manner. This leads me to say, that the so called F. L. Mather Publishing Co., of Buffalo, who took advertising from business men for an intended directory of the harbor associations has been run to earth. The Grand Harbor employed the best detective service and after getting hold of the culprits or at least one of them, refunded to business men any funds which had been paid on account, so that everything in that direction is now squared up. It is possible that this feature of levying on tradesmen a certain amount each year to defray the expense of printing a list of names may soon be done away with. An organization to be any good at all ought to be able to defray its own proper expenses. I hear almost daily that the tradesman consider this lodge business, list of members book, is only blackmailing them and yet they donate a few dollars each year because they don't wish to be spoken of in derogatory terms as no doubt such would be the case among the Toms and Dicks if they refused to put up money for an advertising card in one of these pamphlets, but it is fast becoming obnoxious to tradesmen and it should be beneath the dignity of calling for masters, engineers, pilots, etc., to try to tax anyone they may buy a paper of tobacco from or in using their owners' money for regular and proper expenses.

## BUFFALO.

*Special Correspondence to the Marine Record.*

A little Chicago coal is going forward at a 20 cent rate of freight.

The second largest cargo to come into this port was carried by the Senator. She was loaded with 313,000 bushels of clipped oats. The J. H. Wade brought down the first shipment of barley. She had 93,900 bushels on board.

The steel steamer Andrew Carnegie arrived at this port on her first trip of the season with the largest load of oats ever floated on the lakes. It consisted of 333,000 bushels. Last year the Carnegie broke the record with 323,000 bushels.

The passenger steamers North West and North Land will open the season June 14. The first boat will leave Buffalo that day at 10:15 p. m. The last boat will leave Buffalo September 9, and the season will close at Duluth September 13.

Assistant Engineer Emmons, of the U. S. engineer office here, has gone to Erie to look after the work on the harbor improvements. The first work will be the planting of 2,000 trees at the head of the bay, which will in time provide a natural protection from the encroachments of the water.

Work on the Northern Steamship Co.'s boats is nearly completed at the Union dry dock. All the iron work is finished, and the carpenters will be through by the close of the week. Quite extensive repairs are being made on most of the boats, but they will not be delayed in starting out.

The steel steamer Merida, which damaged her bow plates by ice in the Straits, had 13,660 bushels of wet corn. This was sold for 22 cents a bushel, a loss of about one-third. A few more of these losses and underwriters as well as vessel owners will object to being driven out of port before the ice has disappeared. The steamer Macy had 700 bushels short in her Toledo corn cargo, but the grain was found in the elevator at Toledo.

The Western Elevating Association at Buffalo has decided to hold together and maintain the regular rate of five-eighths of a cent until April 21. Elevator managers think that the chances of an ultimate agreement for the season are fairly bright. The Kellogg elevator is not a party to the new arrangement, and announces that it will handle grain for a uniform rate of one-eighth of a cent a bushel. Just what bearing their attitude will have on the outcome is doubtful.

Thirty of the big grain carriers have reached this port on their first trip this week, and with scarcely an exception have cleared light. A portion of the fleet went to Milwaukee, but the majority returned to Chicago for another cargo of grain. The cargoes already brought down in three days amounted to more than 2,000,000 bushels of grain, principally corn and oats. Only two or three wheat shipments have arrived. The general impression among the grain fleet was that they would find coal cargoes for the return trip from here.



## THE MARINE RECORD.

The passenger steamers of the Northern Steamship Co. may pass through the Portage Lake route this summer, stopping at Houghton. The management of the line is now seriously considering the advisability of the new plan. The steamer North West went through the canals in the fall of 1895, without a tug, and since then they have been greatly improved. By touching there the North Land and North West could effectually serve the copper and iron district of Lake Superior.

Appointments of captains and engineers of the steel vessels of the Lehigh Valley Transportation Co. have been made by Capt. Henry, as follows: Tuscarora, William Williams, captain; S. H. Willson, engineer. Saranac, J. M. Todd, captain; C. R. Plodeck, engineer. Seneca, D. Driscoll, captain; J. Smith, engineer. Wilbur, P. McFarlane, captain; N. Miller, engineer. Appointment of officers for the wooden vessels of the fleet have not yet been made, though it is understood that they will be nearly the same as last season.

Foundations are being placed at the Union Dry Dock Co.'s yards, for the enormous cantilever crane to be put in this spring. Excavations are made to the depth of eight feet, and in these are driven heavy oak piles to the depth of fourteen feet. Upon the top of these piles, but a couple of feet above the floor of the excavation, heavy timbers are bolted. Then the holes are filled with concrete level with the surface of the ground. On this superstructure the heavy stone foundation is laid. The crane will occupy nearly the entire distance between the machine shops and the new dock. It will travel 700 feet in one direction and 171 feet at right angles. Its cost is \$25,000. The iron work will be done by the Wellman, Seaver Engineering Co., of Cleveland.

### WEST SUPERIOR WIS.

*Special Correspondence to the Marine Record.*

The naphtha launch being built for the Water, Light & Power Company is nearly complete and needs but the engine and full outfit. She will be ready by the time the harbor is entirely free from ice, and will be used as a lighter for the company as well as a dispatch boat.

The American Steel Barge Company is rushing the work on the two boats now building and on which they have been working all winter. Barge No. 142, which will be christened Maida, will be ready to launch by the 16th of this month, and the steamer Alex McDougall will be ready by the 15th of May. The new electric crane in the yard is proving a very valuable addition for the rapid handling of plates and heavy work. Port Collector T. B. Mills measured the Maida for tonnage last week which registered 3474 78-100 gross and 3210 74-100 net tons.

### CLEVELAND.

*Special Correspondence to the Marine Record.*

The steamers Yakima and Roumania are at the yards of the Ship Owner's dry dock for minor repairs and some new work.

The Superior City, launched at Lorain on Wednesday was the 29th vessel to built by the Cleveland Ship Building Co. All the others were launched from their Cleveland yards.

The revenue cutter Gresham is at this port awaiting orders from the Navy Department. If it is eventually decided to order her to the coast she will not be able to clear from Lake Erie until the opening of the Welland canal, towards the end of this month.

The new revenue cutters now under construction at the yards of the Globe Iron Works Co., will be supplied with the eophone, the new instrument for locating the direction of sound, first adopted on the lakes by the Northern Steamship Co. Steamers of the Mackinaw division of the Cleveland & Detroit line will be similarly equipped.

Capt. George P. McKay is a very busy man these times, looking after the outfit of the Mutual and Menominee lines of steamers. The latter line consisting of five large steel steamers are now under a season charter, so that after being turned over to the charterers Capt. McKay's labors will be somewhat lessened for the balance of the season.

The composite built steamer Fayette Brown has just come out of the Cleveland dry dock after having her ice damage repaired. Some new bow planking was given her and part of her stern straightened. The stern bearing was also repaired. The steamer Geo. F. Williams is now in dock for bottom calking, several new main deck beams and repairs to stern bearings. Orders are booked well ahead and brisk work seems to be assured for the dry dock during the near future.

The most generous kind of praise is given to the Cleveland Ship Building Co. for their courteous treatment, etc., of marine men at the launch of the Superior City. Invitations to the launch with special transportation facilities and an excellent escort, coupled with a fine, fresh spring day made the first Lorain launch the event of the week and the Wallaces, senior and junior, were, well! slightly eluogized all round. "Jim" of course could stand it, but it was quite a task for Mr. Wallace to take the dose aboard.

It has been stated that the government will commence their dredging contracts at the ports of Ashtabula, Conneaut and Fairport within a week. The dredges are at present in Cleveland, and it is the plan to start at Conneaut first and work up the lake. This plan, says the Record, of Ashtabula Harbor, is not in accord with the wishes of the marine men who have interests at that port. They are of the opinion that, as Ashtabula is the most important port of the three,

the work of dredging should be commenced there first. A protest has been entered and every effort made to induce Col. Jared A. Smith to start at Ashtabula first.

The stockholders of the Northern Transit Co., which was recently incorporated, held a meeting on Saturday and elected C. E. Grover, M. A. Bradley, Martin Mullen, George W. Hausheer and W. A. Collier directors. The officers of the new company which will operate the steamers Badger State and Empire State between Toledo, Cleveland and Ogdensburg, are C. E. Grover, president; M. A. Bradley, vice-president; George W. Hausheer, secretary, and W. A. Collier, treasurer and manager. The steamers will be brought here and placed in dry dock. They will receive a thorough overhauling, and after being put in good shape will be ready for business June 1st.

The local inspectors of steamboats, Capt. George DeWolf and James McGrath have been notified of passing a successful civil service examination. The examination was a very rigid one, and both of the inspectors stood ninety, which is within ten points of being perfect. Seventy is considered fair. Messrs. McGrath and DeWolf are regarded as two of the best men in the service by owners, as well as masters and engineers, and the local office has always been considered one of the best conducted on the chain of lakes. The examination was a much needed one for the whole service, and now the successful candidates are placed beyond the reach of politics or technical disqualification. If civil service means anything it ought to act well in the local steamboat inspection service on the lakes, as elsewhere.

The Cleveland harbor of the American Association of Masters and Pilots of Steam Vessels has decided to form an employment bureau for the benefit of its members. The work of the bureau will be attended to by A. R. Rumsey, shipping master for the Lake Carriers' Association, Capt. S. W. Gould and Capt. C. E. Benham. All members in good standing of the association on the lakes when out of employment are requested to leave name and address with one of the three men named above. Any person needing the services of masters or pilots is also requested to enquire at the office of any of these three. A card giving notice of the formation of the bureau has been distributed at all lake ports. Nothing but good can result from this step and similar branches should be opened at the other principal lake ports as well as here.

### FLOTSAM, JETSAM AND LAGAN.

The steamer Osceola, has been withdrawn from the Grand Rapids and Indiana line.

The Lavinia, which was sunk at Milwaukee two years ago, has been raised and sold to E. E. Napier, of Chicago.

The Anchor line freight house, at Erie, was opened, Monday, for freight. Two boats will leave Erie, April 16, for Lake Superior.

Vessels are now able to reach the Escanaba ore docks, and the steamers Maryland, Massachusetts and Merrimac have left Milwaukee for that port.

The office of the deputy collector of customs at Conneaut has been abolished. John C. Carroll, who has filled the position, will report at Cleveland for appointment.

The Union Transportation Co. will start three boats on Monday, April 18. Two of the vessels will go to Portage Lake for copper and the other will go through to Duluth.

Announcement has been made of the appointment of R. C. Davis as general freight and passenger agent at Chicago, of the Goodrich line of steamers, to succeed A. H. Brown, resigned.

The steamer J. C. Lockwood, which reached Escanaba, Monday, after a hard struggle with the ice, unloaded her cargo of coal and was chartered the same day for grain from Green Bay to Buffalo.

The steamer H. E. Runnells, which ran ashore at Mission Point, Mackinac Island, Sunday morning, was released this morning by the steamer Algolah, after jettisoning three hundred tons of her coal cargo.

A test has been made of a new machine for unloading steel rails from cars into boats, and is said to have proven entirely satisfactory. It is claimed that the machine will revolutionize the handling of steel rails.

The badly decomposed body of a man was found on the north shore of Lake Erie, above Sugar Loaf, on Sunday last. It is supposed to be one of the crew of the steamer Idaho, which foundered off Long Point, last fall.

The grain-laden barge Northwest lies in twelve fathoms of water three miles W. by S. from St. Helena light, and five miles west of McGulpin's Point light. We have not plotted this bearing on the chart, but print it as given by others.

Lightships Nos. 55, 56 and 57, went out Sunday morning to take their positions at Simon's Reef, Gray's Reef and White Shoals. The lightship for Poe's Reef will not be able to take up its station immediately, owing to the ice in the Straits.

Efforts are being made to place the steamer Wellington R. Burt on some Buffalo excursion route. The Burt has been running between Sandusky and Johnson's Island for several years, but as the pavilion at the latter place has been burned, the Burt's occupation is gone.

The schooner J. F. Card, with coal cargo, cleared from the Welland canal Sunday by special permission from the canal authorities. The schooner had been laid up at Port Colborne since last fall. After she had passed through the locks were fastened again as before, until the canal is officially opened.

Navigation at the head of the lakes was opened on Monday by the departure of the large steel steamer W. D. Rees from Duluth for Washburn, to load oats for Buffalo. The Rees led the season's fleet last year, also, departing on April 17, or six days later than this year. Although she could not reach Washburn owing to the ice, yet she was the first craft to leave Duluth.

The launching of the David Z. Norton, at Cleveland, on Saturday, was a complete success, the boat gliding down the ways and into the water without the slightest hitch. The Norton is a steel tow barge, 388 feet over all, 376 feet keel, 44 feet beam, 26 feet depth, 5,400 tons carrying capacity. She will be ready to make her first trip by the beginning of May.

These are happy days for yachtsmen who know how difficult it is to get, when they want to sell, over a half or third of what a vessel cost them. Uncle Sam is in a hurry and has fifty millions burning in his pocket, so he is willing to pay an advance on cost. To receive \$300,000 for a vessel that cost \$250,000, and could not be sold to a private customer for over \$75,000, makes a ship owner realize that this is indeed the greatest and best government the sun ever shone upon.

The lighthouses at Eagle River and Eagle Harbor now show their lights. The steamer R. G. Stewart, of Duluth, passed abreast of Eagle River on her way to Eagle Harbor on the morning of the 8th. She made very slow time of it, working her way through the ice, and she did not arrive at the entrance to Eagle Harbor until late in the afternoon, where she encountered ice four feet thick. Not being able to proceed any further she made an old-time landing by putting her cattle and hogs on the ice, and hauling the remainder of her cargo with teams.

A good deal of hull insurance of the higher classed boats has been placed and rates are a little better than last year. Thus far the Prime-McCurdy syndicate appears to be securing the bulk of the business. Their representatives have been very active within the past few weeks. The Detroit Fire and Marine Co. and the Aetna Co., which has in the past been represented by Mr. Gadsden, of Chicago, as general agent, are now acting with the Prime-McCurdy syndicate and all are pulling like beavers to corral everything in sight worth taking.

The Correspondence School of Technology, of Cleveland, has lately been consolidated with the Institute for Home Study of Engineering, also of Cleveland. The schools were started in 1894, and have been carrying on their work successfully. Prof. E. P. Roberts, of the Correspondence School of Technology, is technical director, F. D. Leslie, business director, and J. H. Norton, secretary and treasurer of the Institute under the new management. The two latter gentlemen have been connected with the Institute for Home Study of Engineering from its inception. These schools were the first to give electrical courses by correspondence. The Institute for Home Study of Engineering has confined its efforts to electrical and mechanical work, while the Correspondence School of Technology has had courses in electrical, mechanical, civil, bridge, and hydraulic engineering. All of these courses will be carried on by the consolidated institution, under the name of the Institute for Home Study of Engineering, the engineers and instructors who have been connected with both continuing in their respective departments.

### RESOLUTIONS OF RESPECT.

The vessel owners of Detroit met this week for the purpose of paying a tribute of respect to the memory of the late Capt. Hugh Coyne. Capt. Eber Ward presided at the meeting and many representative vessel owners were present, including W. O. Ashley, Thomas Adams, L. C. Waldo, John Stevenson, Eber Ward, Byron Whitaker, A. A. Parker, Charles W. Norton, James W. Millen, J. W. Westcott, W. A. Avery, William Livingstone, H. C. McCallum, Edward T. Peck, C. F. Bielmann, John Pridgeon, Jr., D. Whitney, Jr., H. A. Chandler, and A. McVittie. John Stevenson was chosen as secretary. Many addresses were made eulogizing the dead captain and the resolutions of respect were unanimously adopted.

Charles W. Norton, J. W. Westcott and H. C. McCallum, the committee on resolutions, reported the following:

Whereas, The demise of our honored and respected associate, Capt. Hugh Coyne, has come as a personal loss to each of the vessel owners and masters of this port, and

Whereas, While recognizing the impotence of words on this occasion, we feel it a privilege to give some testimony as to the grounds upon which rest the high regard in which we hold his memory; therefore, be it

Resolved, That in the death of Capt. Coyne, the vessel owners and navigators, not only of Detroit, but of all the lake ports, have lost an ever-ready champion of their rights, to whom they have never applied in vain, when their interests demanded a sacrifice of personal interests, time and energy, for the benefit of the whole.

We recognize that in his death not only have we lost a noble and large-minded associate, but also that the loss must necessarily be even more keenly felt by others, and we therefore extend our sincere and heartfelt sympathy to his immediate family, who must suffer a loss which none could appreciate, except themselves, who have had the privilege of an holy and intimate association with him, whose noble heartedness was everywhere recognized."

Dated at Detroit, April 8, 1898.

CHARLES W. NORTON,  
J. W. WESTCOTT,  
H. C. MCCALLUM.



## QUARTERLY SHIPBUILDING RETURNS.

AMERICAN VESSELS UNDER CONSTRUCTION OR COMPLETION AT LAKE PORTS APRIL 1, 1898.

NAME OF VESSEL, SHIPBUILDERS OR SHIPBUILDERS' NUMBER.	TYPE.	GROSS TONS.	HULL DIMENSIONS.				ENGINE DIMENSIONS.	ENGINE BUILDERS.	BOILER DIMENSIONS.			BOILER BUILDERS.	OWNER.	ESTI- MATED COST.
			Length over all.	Length on Keel.	Beam.	Depth Molded.			No.	Diam.	Length.			
AMERICAN STEEL BARGE CO., W. Superior. Alex. McDougall.....	Screw.	5900	430	414	50	27	19, 28½, 43, 66x40.	Cleveland Ship Bldg. Co.	2			Babcock & Wilcox	American Steel Barge Co.	\$240,000
No. 142.....	Schr.	5500	390	376	46	26			1	8	11	Wickes Bros., Saginaw.	Minnesota Steamship Co.	130,000
ANDERSON, ALEX., Marine City.	Screw.		142	130	30	9	16, 32x36.	S. F. Hodge & Co.	1	8-6	13		Price Lumber Co., Fremont, O.	28,000
BELL STEAM ENGINE WORKS, Buffalo. Harvey D. Goulder.....	Tug.		90		23	14	20, 40x30.	Bell Steam Engine W'ks.	1	12	16	Kingsf'rd Fdy & Mch Wks	L. P. & J. A. Smith.	20,000
BRITTAIR, R. C., Saugatuck.....	Screw.		103	96	18	7-6	14x16.	H. Blocker.	1	5-6	10	Johnstone Bros.	R. C. Brittain.	8,000
BURGER & BURGER, Manitowoc.....	Tug.	73	90	80	19	8	10, 20x16.	Wilson & Hendrie.	1	5-6	10	Manitowoc Stm. Boil. Wks	Endress & Son.	10,000
	Tug.		75	67	16-6	8	14x16.	Old engine	1	5	8		John Bradnell.	8,000
CLEVELAND SHIP BUILDING CO., Cleveland. No. 29.....	Screw.	6000	450	430	50	28-6	Quadruple.	Cleveland Ship Bldg. Co.	2			Babcock & Wilcox	A. E. Wolvin, et al., Duluth.	235,000
No. 30.....	Screw.	5700	426	406	50	28	Quadruple.	Cleveland Ship Bldg. Co.	2			Babcock & Wilcox	Presque Isle Transportation Co.	220,000
No. 31.....	Screw.												R. R. Rhodes, et al., Cleveland.	250,000
No. 32.....	Screw.		438	414	50	28		Cleveland Ship Bldg. Co.				Cleveland Ship Bldg. Co.	Nor. Lakes S. S. Co., Detroit.	240,000
CHICAGO SHIP BUILDING CO., Chicago. Australia.....	Barge.	3745	388	376	48	26							James Corrigan, Cleveland.	140,000
Wm. R. Linn.....	Barge.	4000	420	400	48	28	21, 29, 42, 64x42.	Chicago Ship Bldg. Co.	2	14-8	11-6	J. Mohr & Sons, Chicago.	C. W. Elphicke, et al., Chicago.	220,000
	Barge.			376	48	26							Nor. American Trans. Co., Detroit.	130,000
CRAIG SHIP BUILDING CO., Toledo. [Fire Boat.....]	Tug.		105		23	9	12, 14x16.						U. S. Engineer Corps.	120,000
	Boat.		118	107	25-6	12-6	12, 20x16.	Taylor Water Tube.					City of Chicago.	49,900
DETROIT DRY DOCK CO., Detroit. No. 126.....	Screw.	325		43	17		Compound	W. & A. Fletcher Co.	6	12-6	12-6	Dry Dock Engine Works.	C. & B. Line.	400,000
No. 127.....	Screw.	190		165	33	12	Triple Expansion.	Dry Dock Engine Works.	2			Dry Dock Engine Works.	Dunbar & McMillan.	75,000
No. 128.....	Screw.	5000	420	400	46	28	Quadruple.	Dry Dock Engine Works.	3			Dry Dock Engine Works.	Western Transit Co., Buffalo.	250,000
No. 129.....	Screw.			165	33	12	Triple Expansion.	Dry Dock Engine Works.	2			Dry Dock Engine Works.		75,000
DAVIDSON, JAMES, W. Bay City. No. 87.....	Screw.	3100	325	306	44	24	16, 25, 42x36.	S. F. Hodge & Co.	2	12-3	12	Wickes Bros., Saginaw.	James Davidson.	130,000
No. 88.....	Screw.	3100	325	306	44	24	16, 25, 42x36.	S. F. Hodge & Co.	2	12-3	12	Wickes Bros., Saginaw.	James Davidson.	130,000
No. 89.....	Barge.	3500	318	308	44-6	24							James Davidson.	90,000
No. 90.....	Barge.	3500	332	322	44-6	24							James Davidson.	90,000
DEVNEY, J. P., Ashtabula. GLOBE IRON WORKS CO., Cleveland. Algonquin.....	Rev.		205½	188	32	17	25, 37½, 56½, 30x30.	Globe Iron Works Co.	4	11-8	10	Globe Iron Works Co.	U. S. Revenue Marine Service	193,000
Onondaga.....	Cutters		205½	188	32	17	25, 37½, 56½, 30x30.	Globe Iron Works Co.	4	11-8	10	Globe Iron Works Co.	U. S. Revenue Marine Service	193,000
No. 73.....	Barge.	4500	378	366	44	26		Globe Iron Works Co.	1	8-6	9	Globe Iron Works Co.	Willson Transit Co.	120,000
No. 74.....	Screw.	5400	430	410	50	28		Globe Iron Works Co.	3	12	12	Globe Iron Works Co.	John Mitchell, et al.	230,000
HEATH, E. W., Benton Harbor.....	Tug.		79	69	19	10-6	14, 30x20.		1	8	12	Kingsf'rd Fdy & Mch Wks	Lydon & Drews Co., Chicago.	14,000
HALL, GEO. W. & CO., Ogdensburg.....	Tug.		90					Kingsf'rd Fdy & Mch Wks						15,000
HILL, W. C., Fish Creek.....	Screw.	133	120	25	8		14x16.						Capt. E. B. Graham.	25,000
	Tug.		75	65	16	7	14x16.						Builders Account.	4,000
JENKS SHIP BUILDING CO., Port Huron.....	Tug.			80	20	12	14, 22½, 36x38.	Phoenix Iron Works	1	10	14		Otto Young.	15,000
RACINE BOAT MFG. CO., Racine, Wis. [Stm. Yacht.....]	Yacht.		75	12	4		6½, 10½, 16½x9½.						M. A. Ryerson.	20,000
	Yacht.		75	12-6	4		6½, 10½, 16½x9½.						Maytham Tug Line.	30,000
UNION DRY DOCK CO., Buffalo.....	Tug.		90	80-3	23	12-6	16, 25, 40x27.	H. G. Trout.	2			Roberts Wat. Tube Boil. Co.	Hickler Bros.	15,000
	Tug.		70											
WHEELER, F. W. & CO., W. Bay City. Samuel F. B. Morse.....	Screw.	6000	476	456	50	29	26½, 37, 54½, 80x42.	F. W. Wheeler & Co.	4	13-4	11-6	Wickes Bros., Saginaw.	Bessemer Steamship Co.	255,000
John A. Roebler.....	Barge.	6500	450	436	50	28-6			1	9	10	Wickes Bros., Saginaw.	Bessemer Steamship Co.	155,000
John Fritz.....	Barge.		450	436	50	28-6			1	9	10	Wickes Bros., Saginaw.	Bessemer Steamship Co.	155,000

## CANADIAN VESSELS UNDER CONSTRUCTION AT LAKE PORTS.

BERTRAM ENGINE WORKS, Toronto. Hull No. 27.....	Stmr.		165-6	160-10	30	13							Preseott Elevator Co.	\$ 35,000
Hull No. 28.....	Stmr.		165-6	160-10	30	13							Preseott Elevator Co.	35,000
No. 29.....	Screw.		279-4	270-6	36	14	28, 44, 74x72.	Bertram Engine Works.	4	11	11-6	Bertram Engine Works.	Richelieu & Ontario Nav. Co.	275,000
No. 30.....	Screw.		162-6	140-6	30	5	16x72.	Bertram Engine Works.	1	5-2	21-6	Bertram Engine Works.	Canadian-Pacific Ry. Co.	30,000
No. 31.....	Screw.		162-6	140-6	30	5	16x72.	Bertram Engine Works.	1	5-2	21-6	Bertram Engine Works.	Canadian-Pacific Ry. Co.	30,000
CALVIN CO., Garden Island, Ont. Smyrna.....	Screw.			200	37	15	18, 30, 43x30.	The Calvin Co.	2	11-4	12	Polson Iron Works Co.	The Calvin Co.	75,000
POLSON IRON WORKS, Toronto. [Stern Wheel.....]	Wheel.		162	135	30	5-8	16x72.	The Polson Iron Works.	1	71"62"	22	Polson Iron Works Co.	Canadian-Pacific Ry. Co.	40,000
	Wheel.		52	43	9		4½x18.	The Polson Iron Works.	1	3	5-5	Polson Iron Works Co.	The Klondike Co. (Limited.)	4,000
	Yacht.		54	44	8	4-9	5½, 8½, 14x8.	The Polson Iron Works.	1			Chas. D. Mosher.	T. Easton.	6,000
SIMPSON, M., Toronto.	Stmr.			105	22	7	Compound						Beckwith Nav. Co., Ontario.	10,000

## QUARTERLY SHIPBUILDING RETURNS.

The accompanying table showing vessels under construction at lake shipyards for the quarter ended April 1 gives a total of fifty-two craft, exclusive of miscellaneous and small tonnage such as dredging outfits, canal boats, scows, small tugs, yachts and other fancy tonnage. On the American side of the lakes the extreme is reached in building steel cargo steamers 475 feet in length to carry 6,500 tons, and a side wheel passenger steamer to cost \$400,000. The total estimated cost of the forty-two vessels aggregate \$4,715,000, or \$112,238 as the mean cost for each hull and if we allow \$285,000 for the cost of miscellaneous tonnage now building the \$5,000,000 mark will be reached.

On the Canadian side we list ten vessels costing \$540,000 or an average mean cost of \$54,000 each to which might easily be added another \$10,000 for the inclusive cost of unlistable craft now building, making a total of \$550,000 worth of new construction at Canadian lake ports, or on both sides of the lakes \$5,550,000 which is rather a brisk showing for the quarter.

## PANAMA CANAL—COMPLETION OF DOCK.

Consular Clerk Murphy writes from Colon, under date of February 3, 1898, to report the completion of the La Boca dock, the Pacific terminus of the Panama canal. The real importance of the work at La Boca, says Mr. Murphy, remains to be demonstrated. The tide fluctuation at Panama amounts to over 25 feet, and at the lowest ebb the bottom of the sea is exposed for a mile or more from the shore. As to whether or not vessels will venture to use the La Boca dock, time alone will prove. He continues:

I have heard the opinion expressed that the dock will prove to be a complete success. On the other hand, I have heard it even more confidently stated that this is only another example of the waste which has characterized the

management of this apparently simple undertaking. To one traveling across the Isthmus, it appears that there can be no obstacle to the completion of the canal which money honestly used, engineering skill, and common sense can not easily overcome. The land is mostly level, the highest point being little over 300 feet above the sea. The distance is only about 45 miles. The freshets of the river Chagres appear to be the only difficulty, and it appears that provision for the storage or escape of such water can be made.

The work, if it were in American hands and under American control, could, I believe, be completed in a few years at moderate cost. About one-half of the work—14 miles at this end and 6 miles at the other—has been completed or partially completed, though the freshets of the Chagres river have caused great damage during years of neglect.

## TREASURY DECISIONS RELATING TO VESSELS AND NAVIGATIONAL INTERESTS.

## TONNAGE OF VESSELS.

Marking of spaces to be deducted from gross tonnage.

TREASURY DEPARTMENT,  
BUREAU OF NAVIGATION,  
WASHINGTON, D. C. April 1, 1898.

SIR: This office is in receipt of your letter, dated the 30th ultimo, relative to the marking of spaces, the deduction of which is allowed from gross tonnage under the act of March 2, 1895.

You state that at some yards it is the practice to countersink the letters with a punch, instead of carving them.

The act cited requires the letter to be "cut". If in the countersinking you mention the fibers of the wood are broken or cut so that such countersinking constitutes an equivalent for cutting in the usual manner, and marks the letters legibly and permanently, the Bureau will not interfere with the practice.

Respectfully, yours,

T. B. SANDERS, Acting Commissioner.  
SURVEYOR OF CUSTOMS, Philadelphia, Pa.

## FEES.

Fees for admeasurement of boats.

TREASURY DEPARTMENT, April 1, 1898.

SIR: This department is in receipt of your letter, dated the 29th ultimo, addressed to the Supervising Inspector-General of Steam Vessels, and by him referred.

In the case of the boats you mention as being under 15 tons admeasurement, you are authorized to charge fees in your accounts for admeasurement only when it is necessary to issue marine licenses. License and official number are requisite if the case is such as to fall within the purview of section 7, act of June 19, 1886.

Respectfully, yours,

O. L. SPAULDING, Assistant Secretary.  
SURVEYOR OF CUSTOMS, Galena, Ill.

## VESSELS IN SECTIONS.

Vessels transported in sections, via Stikine river, may be assembled in Canada and proceed to Circle City.

TREASURY DEPARTMENT, April 1, 1898.

SIR: This department is in receipt, from the Honorable the Secretary of State, of a copy of a letter, dated the 29th ultimo, from the British ambassador here, in which he states that he is informed by the Governor-General of Canada that American stern-wheel steamers built in sections and transported by way of the Stikine river to Lake Teslin will be dealt with in the same manner and under the same regulations as in the case of similar vessels transported in sections by the Dyea route.

The regulations to which he alludes are embodied in department circular No. 26, of February 5, 1898, and provide that small American river steamers may be carried in sections from Dyea, etc., to the head of waters of the Yukon river, to be assembled there free of customs duty, and may carry cargo and passengers from customs stations at those head waters to Circle City and other places in Alaska, but can not engage in the coasting trade from one place to another in Canadian territory.

Respectfully, yours,

O. L. SPAULDING, Assistant Secretary.  
COLLECTOR OF CUSTOMS, Port Townsend, Wash.



MARITIME LAW.  
THE MEXICO.

IN RE COMPANIA TRANSATLANTICA.

*Circuit Court of Appeals, Second Circuit, January 7, 1898.*

**COLLISION—PRESUMPTIONS—CARGO INSURERS—LIMITATION OF LIABILITY.**—The rule that where fault on the part of one vessel, sufficient to account for the collision, is established, the burden is then on her to clearly show fault on the part of the other, applies as against underwriters of the cargo of the vessel so in fault; and it makes no difference that the other vessel has sought the benefit of the statutes for limitation of liability.

**SAME—STEAMERS AT SEA.**—The fact that one of two colliding steamers had the reversing gear of her engine clamped fast to the rock arm, so that from one to five minutes was required to release it after notice to reverse, held a gross fault, rendering her liable.

**SAME.**—When two steamers approached each other on the open sea at night, held, on the evidence, that the one having the other on her starboard bow, after crossing the bow of the privileged vessel, so as to have her green light constantly in view, began porting and continued to do so until she struck the latter on the starboard side, and was consequently in fault; and held, further, that the privileged vessel was not in fault for not reducing her speed, or for starboarding so as to reduce the angle of collision. 78 Fed. 653, affirmed.

Appeal from the District Court of the United States for the Southern District of New York.

Petition for limitation of liability.

This proceeding was instituted by the petitioner in the District Court, Southern District of New York, in consequence of a collision which occurred between the steamer Mexico and steamer Nansemond, December 21, 1895. The Nansemond, as a result of the collision, sank, with her cargo, and all became a total loss. The Mexico sustained no damage. In May, 1896, libels were filed by the owners of the Nansemond, and by the underwriters of a portion of her cargo, against the Mexico, in the Southern District of New York, and thereafter petitioner filed its petition for limitation of liability.

Before Wallace, Lacombe and Shipman, Circuit Judges.

Lacombe, Circuit Judge (after stating facts). It may be quite sufficient, in this case to affirm upon the opinion of the district judge. Indeed, when the record is examined—especially the testimony given by the only survivors from the deck of the Nansemond—it is difficult to understand upon what theory the decision of the district court could be reversed. The Nansemond, aside from any faulty navigation, was concededly in fault because her reversing gear had been made fast by a clamp to the rock arm, which would require from one to five minutes to release it after notice to reverse. Counsel for the Nansemond concedes that, when the vessels came in sight of each other, she had the Mexico on her starboard bow. She was therefore the burdened vessel, conceding her own fault in the matter of the reversing gear; and the burden was upon her to show some fault on the part of the privileged vessel, if the latter is to be made to share the loss. "Where fault on the part of one vessel is established by uncontradicted testimony, and such fault is itself sufficient to account for the disaster, it is not enough for such vessel to raise a doubt with regard to the management of the other vessel. There is some presumption, at least, adverse to its claim, and any reasonable doubt with regard to the propriety of the conduct of such other vessel should be resolved in its favor."

The story of the Mexico is that the masthead and green lights of the Nansemond were sighted on the port bow of the Mexico; that they narrowed on the port bow, and drew across until they were on the starboard bow; that the Nansemond had a-ported her wheel suddenly, closing in her green light and exposing her red light, which seemed to be near by, whereupon the Mexico ordered her helm hard a-starboard, to ease the blow. The navigation thus attributed to the Nansemond is indeed extraordinary. Having crossed the Mexico's bows, and thus brought the latter's green light into view of those on the Nansemond, she is charged, not only with porting to such light, but with following the movement of the wheel with a hard a-port; thus swinging around from a position of safety on the Mexico's

starboard bow till she came back on the course of the Mexico, striking her on the starboard side, and at right angles to such course. The angle of collision was reduced from 90° to 45° by the starboarding of the Mexico "to ease the blow." However extraordinary this story, it is fully corroborated by the evidence of the two survivors from the deck of the Nansemond. There is in the narrative given by those on the deck of the latter vessel the usual discrepancies as to distance, time, the bearing of lights, etc., but all agree in the statement that she made no change of course until in the jaws of collision. All the testimony, without a single exception, shows that, when sighted, the Nansemond must have been in such a position as to indicate positively to those on the Mexico that the latter was the privileged vessel, under the starboard-hand rule; and we are not to assume that they at once undertook to get out of the way of the burdened vessel, instead of keeping their own course, without some evidence to indicate that such was the fact. In view of the



testimony from the Mexico, corroborated by the direct and positive evidence of Landeborg, the Nansemond's pilot, and of Hellburg, her boatswain, that the Mexico did not change her course, down to the collision, the charge that the Mexico improperly starboarded her helm is not sustained by proof; and under the decision of the Supreme Court in *The Britania and The Beaconsfield*, 153 U. S. 130, 14 Sup. Ct. 795, it certainly cannot be held to be a fault that she did not reduce her speed or stop. No other faults are charged against her, and we therefore concur with the conclusion of the district judge, that the Nansemond was solely in fault. The decree of the district court is affirmed, with costs.

Captain George A. Zinn, Corps of Engineers, U. S. A., gives notice that the light-ship has been replaced, April 6, 1898, at the south end of the unfinished breakwater, Milwaukee Bay, at the expense of the Engineer Department.

## BREAKWATER AT BUFFALO.

Buffalo harbor is to have the distinction of having the longest breakwater in the world. The already existing breakwater is 7,600 feet long, and was commenced in 1868 with an originally projected length of 4,600 feet. This was increased by plans adopted in 1874 to 7,000 feet, and the work was completed in 1894. The old project for Buffalo included an arm of the breakwater extending from its southern end and uniting with the sand-catch pier, thus forming an inclosed outer harbor about a mile and a half long. In the meantime the scheme for a much greater outer harbor was conceived and steps taken to bring it to the attention of the government. This project had in view the construction of a new breakwater practically in the extension of the old one, from its southerly end to Stony Point, making an outer harbor about four miles long and a half mile wide, permitting the utilization of the entire lake front of Buffalo.

In time the scheme matured, general plans were prepared, estimates of cost were made and finally Congress adopted the project and authorized contracts entered into.

This is how Buffalo came to be in line for securing the longest breakwater in the world, work on which will be again started as soon as the weather permits, under the supervision of Maj. Thomas W. Symons' Corps of United States Engineers, of Buffalo. The new breakwater will be 12,500 feet, which, with the section already built of 7,600 feet, will make the total length from the light-house to Stony Point 20,100 feet, very nearly four miles. "There is no breakwater, either built or in contemplation, which is as long as the new portion of the Buffalo. The nearest approach to it is the celebrated breakwater at Cherbourg, France, which is about 12,200 feet in length, and cost \$10,000,000, and was about seventy years in building. The Buffalo breakwater, besides being the longest in the world, will surpass all other breakwaters in one other respect, and differ in some of its important details from any breakwater ever built.

For 7,500 feet at its southerly end the new breakwater will be a timber crib structure, similar in general construction and appearance to the old breakwater in front of the city. But a breakwater, exposed as it is, demands a good foundation, and the entire lake bottom along its location is soft mud. The line of the breakwater crosses almost at right angles an old prehistoric river, some two miles wide, which ran from east to west, the rock bottom of which was plainly disclosed and outlined by the soundings, and which has become filled by alluvial and lacustrine deposits to an average depth of 60 feet. To get a good foundation a part of this great thickness of mud must be removed and replaced with good materials for foundations.

This requires the excavation of a gigantic trench 50 feet wide on the bottom and 30 to 50 feet deep through the mud to the bottom of the lake, where the water is 30 feet deep. As each section of the trench is completed it will be back filled with gravel dredged from the Niagara river or some other place in the vicinity, which will be brought up to the level of the lake bottom. This gravel, confined in the trench, will, it is believed, afford some foundation for the breakwater.

It is in respect to its great depth of foundation that the Buffalo breakwater differs from and surpasses all other breakwaters. For 5,000 feet in length between the existing old breakwater and the timber crib breakwater is to be what is called a rubble mound breakwater. This is a great heap of stone dumped on the natural bottom of the lake, and brought up to a height of twelve feet above mean lake level. There are many rubble mound breakwaters and modifications thereof, scattered over the world, but the Buffalo one is the first to be built on the Great Lakes, and therefore, must be regarded as something of a pioneer. About one-half of the bulk of the breakwater will be quarried stone and one-half gravel dredged from the Niagara river. The gravel is used in order to reduce the cost of construction; the stone costs in place from \$1 to \$1.50 per cubic yard, while the gravel costs but 13 cents per cubic yard. No other breakwater has ever been built, as far as known, using gravel as a hearing and foundation, and it is in respect to this use of a finely divided cheap material for about half the mass that Buffalo's breakwater will differ from all others. It is quite a radical departure from all previous practices.





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THE London Shipping World contains the following: "I find that in the past month a steamer was registered with no register tonnage. She was built at Renfrew for London service, and is the Hotspur, a powerful, steel built vessel, which has the minus sign (—) in the official register for the net tonnage. It is puzzling to know on what dues will be paid". It appears that even the British code of measurement is susceptible of peculiar conditions.

CAPTAIN GEO. P. MCKAY, manager of the Mutual and Menominee lines of steamers has probably done more good work towards the better lighting and placing of adequate range marks on the lakes and their connecting waterways than any other individual. As chairman of the Committee on Aids to Navigation in the Lake Carriers' Association he has fully carried out the duties of his position on that committee and that he is one of the most valuable personal members of the association is shown by his regular annual election to the secretaryship of the organization.

ALL of the vessels purchased so far by the government for auxiliary naval purposes had been classed or rated by the American Shipmasters' Association, of New York, in the "Record of American and Foreign Shipping," a universally known classification register. The value of a hull is determined by the class she bears in an accepted register. It is a builders', owners' and underwriters' safeguard and the United States government no doubt were well advised in judging of the construction of the naval auxiliaries from the ratings given them in the "Record of American and Foreign Shipping."

A movement to fix a date officially for the opening of navigation hereafter is being discussed by vesselmen. The question was brought up on account of the recent losses in the Straits from ice. All grain charters will be made subject to such an official opening, and boats will be held back, if the owners so desire, until that day regardless of the fact that the straits may be apparently free of ice. In the past the shippers have claimed that they had a right to demand that vessels on which they had grain cargoes should sail as soon as one boat had gone through the Straits, and the vessel men have claimed that so long as there is ice in the channels and boats are subject to peril, they are not obliged to send them out. All this would be obviated if an official opening date was established each season. The Lake Carriers' Association will probably take up the matter, and secure frequent as well as reliable ice reports from the Straits and vicinity before the opening of another season. The committee on aids to navigation of the Lake Carriers' Association, would be the best authority to "push the button" so as to proclaim free navigation at the Straits.

## LAKE LEVELS.

The lakes are the determining factor in the question of rates between the West and the seaboard, and that for obvious reasons. These relate mainly to the depth of water in the lake channels. For example, the Detroit river has been deepened at the Lime Kiln Crossing from an original depth of thirteen feet to twenty-one feet; the St. Clair Flats have been deepened from nine and one half feet to twenty feet, and the St. Mary's river from nine and one half feet to very nearly twenty feet. The Niagara river is having its barrier reef at the outlet of Lake Erie cut down to twenty-one feet to extend deep water as far as Tonawanda. With every stage of advance made in this process of improvement, the tonnage of the lake freighter has gone on increasing, and the average rate of lake freight has decreased. When the lake harbors are deepened to correspond to the present or proximate depth of water in the channels, the revolution in the condition of lake navigation will be complete, and with a uniformly attainable draft of eighteen feet the capacity of the 5,000 ton freighter will be fully utilized.

The chart of fluctuations in lake levels for the past twenty-eight years shows that both Lake Erie and Lake Ontario reach high water before Lakes Huron and Michigan. The high water of Lake Superior appears to prolong the high water in Lakes Huron and Michigan, or brings the culmination later than the normal time. The theory that the heavy snowfall of recent winters, and the rainfall of last year have had much to do with the present rise of the lake levels is not, therefore, a plausible one. The fact is that the physics of the lakes have never been adequately studied, and, considering the magnitude of the interests dependent on an accurate knowledge of the conditions affecting the volume of the water there, it is greatly to be desired that this subject should receive more systematic attention.

Marine interests are now becoming alarmed over the continued lowering of the waters of Lake Superior. At Duluth the water is now down 30 inches from last year's level, and is of the same effect as though thousands of dollars' worth of dredging had not been accomplished. The "Soo" canal has not yet been opened, so that boats do not know the depth to which they may load, but it is safe to assert that all grain cargoes will be thousands of bushels short.

The reason for this low water is not clear, and the old talk among vessel men of the subterranean passage to Lake Huron is revived. This is furthered by the fact that the water in Lake Huron is correspondingly high, and it is not going down or being supplied by the St. Mary's river from Lake Superior.

## CHARGES FOR ORE TRIMMING.

The committee of the Lake Carriers' Association appointed at its annual meeting to take up the question of charges for ore trimming and unloading during the season of 1898, of which committee Mr. B. L. Pennington, of Cleveland, was chairman, has concluded its work and sent its report to the executive committee of the association.

The price for trimming ore at all shipping ports is to be 2½ cents per ton. Responsible parties have arranged to do the work. Except at Escanaba and Ashland, railroad companies owning the docks are to do the trimming. At Escanaba and Ashland private parties are to do it. The committee believes these parties competent to do the work satisfactorily and without strikes or delays.

The committee had hoped that the price for unloading ore would be 13 cents per ton instead of 14 cents, the price which prevailed last year. The dock companies recognized the justice of the vessels' claims to a lower price, and would probably have conceded the reduction but for the recent advance in the price of labor. The price of unloading ore will therefore remain 14 cents, as last year, but in the division of this between labor and dock owners the labor will receive more than last year, and the dock owners less.

## EASTERN FREIGHT REPORT.

Messrs. Funch, Edye & Co., New York, report the condition of the eastern freight market as follows: The declining tendency of our freight market has not been of long duration, since, at time of writing, the demands has quite overtaken the supplies of steamers offering. The rate for Cork f. o. continues at 3s. 4½ for April, and with every prospect of equally advancing to that figure for May loading. An unusually heavy number of large vessels, has been closed for heavy grain, with proportion of oats to picked ports, on berth terms, at from 2s. 10½d. and 2s. 6d. @ 3s. and 2s. 7½d. respectively—as to ports of discharge—and full cargoes of heavy grain by such tonnage command from 3s. 1½d. @ 3s.

3d. In other standard trades business has been inactive; the overhanging war cloud at the moment disturbing timber shipments from the Gulf—for which owners had latterly begun to show some interest at rates approaching shippers' ideas.

Sail tonnage remains very scarce, which fact, however, is fully offset by reduced enquiry. The fear expressed in our last report, that rates for case oil were likely to have to undergo a reduction, has been borne out by the fact that demand for tonnage in this direction has markedly weakened, and former rates are no longer obtainable. A further decline may be expected, and we consider owners will do well by not holding their tonnage too firmly in hand. In other lines nothing of special importance has transpired.

## A SENSIBLE VIEW.

Henry B. Joy, of Detroit, who has just returned home after a trip to Washington and New York, speaks very strongly of the necessity of learning thoroughly the lesson taught by the present crisis, and never again permitting the United States to be placed in a position which renders it unable to support its diplomacy with a proper backing of force. "If we had done as those who know the necessity have constantly advocated," he said, "we would have had an adequate navy, properly manned and equipped, so that such an emergency would not require us to send half drilled crews to sea in improvised and inadequately armed vessels. The necessity of buying warships abroad instead of having them built of American material, by American workmen in American shipyards, ought never to occur again. The Navy Department is driving, with all possible vigor the preparation of improved cruisers and picket boats. The New York navy yard is taxed far beyond its powers, as also are all other similar yards of the government. And we have no dry docks for our battleships at all.

"It is on some of these auxiliary improvised cruisers that the services of the naval reserves are to be required. While these auxiliary vessels are not suitable strictly for war purposes, yet they are the best and the only means available in the hour of our need, and their necessity on picket duty with the fleets and on coast guard service is absolutely imperative."

## THE "SOO" LOCK READY.

Both the American and Canadian locks of the Sault canals are in readiness for the season's traffic. Water was let into St. Mary's Falls canal through the movable dam last Friday. Work on the floor and culverts of the Poe lock is about finished. When the new swinging guard gates are completed, they will be placed into position with the aid of pontoons. The other work in connection with the improvement is finished. The same firm has the contract for removing the miter sill of the swing dam, and will begin work on the contract just as soon as the Canadian canal opens so they can transfer their dredge to a point above the swing dam. They have only twenty-one days from the time they commence work in which to complete the task. They have already used fifty tons of iron, and it will require ten tons more to complete the work. The large Canadian locks can be used free of tolls and whenever desired by all classes of tonnage.

## THE PASSENGER WHALEBACK STEAMER.

The Christopher Columbus, an American whaleback excursion steamer, is to cross the ocean. After 1898, Lake Michigan will not be big enough for this famous excursion boat, and she is to become one of the glories of the Paris exposition of 1900. Captain McDougall, Mr. J. Keith, Mr. Grant Whistler, and others interested in the boat, have been in conference and have arrived at the conclusion that Paris wants the whaleback, and that it will prove an attraction there. The plans of the managers are to run the boat out of Chicago this summer, take it to New York in the autumn, work it there during the summer of 1899, and in the spring of 1900 cross the Atlantic with a special party for Paris and the exhibition.—So says a foreign exchange.

## LAKE FREIGHTS.

A rather weak freight market is the indication this week. A summer charter for a block of ore from the head of Lake Superior to Ohio ports was closed at 55 cents, and Escanaba is freely offered at 45 cents for the season, with no takers. A shipment of Leiter wheat from Chicago was placed at 1½ cents. The corn rate was 1½ cents, with 1¼ cents asked. Coal shipments are dull at former rates, though a number of small cargoes are being regularly loaded for light draft ports.



## LAUNCHES OF THE WEEK.

The steel towbarge D. Z. Norton, was successfully launched from the yards of the Globe Iron Works Co. on Saturday, April 9th, and although the weather was not all that could be desired a large number of people were in attendance to witness the launch.

The Norton was built to the order of the Wilson Transit Co., Cleveland, Capt. Thomas Wilson, managing owner. Her general dimensions are, 378 feet over all, 366 feet keel, 44 feet beam and 26 feet deep. Estimated cost \$120,000.

As a neat, clean, side launch nothing could have slipped off the ways easier and more even than the Norton did. Her packing held firm until the hull had fairly cleared the ways, the immense steel floating "warehouse" was handsomely water borne. Such is the usual success attending all of the punctual launches from the yards of the Globe Iron Works Co.

The marine event of the week at Cleveland was the launch of the Superior City, at the Lorain yards of the Cleveland Ship Building Co., on Wednesday. Thousands witnessed the launch, among whom were a large sprinkling of the fair sex in all of their Easter glory.

Precisely at 2 p. m., Supt. Bristow gave the signal and at the same instant Miss Inez Pierce, daughter of the manager of the C. L. & W. R. R., done the beautiful at the stem in the most graceful and composed manner, and the Superior City taking a hitch out of herself, floated majestically in her element.

After the launch a luncheon was served in the company's large mold loft. Speeches were made by Mayor Coffinberry, of Lorain, Mayor Leavengood, of Elyria, and Mr. J. M. Hoyt, who represented the Zenith Transit Co., owners of the steamer. The Superior City will be commanded by Capt. Ralph Lyons, one of the most successful masters on the lakes, and Chief Engineer Andrew Hoss will have charge of the machinery. Marine expert Robert Logan, of Cleveland, superintended the building of the steamer for the owners.

The steamer Superior City, built to the order of the Zenith Transit Co., of Duluth, A. B. Wolvin, president and general manager, measures 430 feet between perpendiculars, 450 feet over-all, 50 feet beam and 28 feet deep. She is built of open hearth steel throughout, on what is known as the transverse system of channel bar construction, that is, with channel bar floors, channel bar frames and deck beams. The big boat has a five and a half-foot water bottom, extending from collision bulkhead to engine room bulkhead, divided into twelve water-tight compartments. The lower hold is divided into six compartments. Her main deck beams are laid every eight feet apart but no deck. The spar deck is entirely of steel, with thirteen hatchways, twenty-four-foot centers each. This is so as to enable the ship to be loaded or unloaded by working all of the hatches at the same time, the grain, ore and coal spouts and ore hoists all over the lakes having uniform centers of twenty-four feet. The steamer has three steel pole spars and steel deck houses. She will have a "Providence" steam windlass and capstan forward, steam capstan aft, furnished by the American Ship Windlass Co., Providence, R. I., and a Williamson steam steerer with the Cleveland Ship Building Co.'s special arrangement for hand and steam gear located in the pilot house. There will also be located on the spar deck three of the builders' patent winding engines for the handling of wire mooring lines. This is something new in lake practice, it having been used on the ocean for some time in handling large vessels.

The ship will be lighted throughout with incandescent lamps. There will be two direct connected dynamos and about 275 incandescent lamps throughout the ship, which includes all of the signal lights, on the spars, etc. She will also have six arc lights for lighting the deck so that the ship can be loaded or unloaded at night. One of the special features in this ship is the raising of the deck from the boiler house aft, making what is known as a poop deck, the houses aft being located all below this deck.

The motive power of the Superior City will consist of one quadruple expansion engine, having high pressure cylinder 17 inches in diameter; first intermediate cylinder 25 1/2 inches in diameter, second intermediate cylinder 39 inches in diameter, low pressure cylinder 60 inches in diameter, with common stroke of 40 inches. She will have a compound air pump and condenser, two ballast pumps, feed pump, pony pump, bilge and cold water pumps. The boiler power will consist of Babcock and Wilcox water tube boilers, of a combined heating surface of 7,000 square feet, to be allowed a working pressure of 250 pounds of steam to the

square inch. It is expected that this vessel will carry 7,000 gross tons of ore on the present draft of water and about 3,000 tons of water ballast when necessary. She is built very strongly, with the expectation of loading to the anticipated depth of twenty feet when the channels shall have been deepened to this extent. She is expected to be ready for sea about the first day of May and when completed will cost about \$255,000.

## SILT DEPOSIT AT SANDUSKY.

Vesselmen think that the "deep hole" at the mouth of Sandusky bay is rapidly filling up, and Capt. Baxter, of the light-house tender Haze, is investigating the matter. The filling in of the "hole" is the result of the construction of the breakwater that was built into the lake at the northern end of Cedar Point. The dyke has caused the water to flow around the point with an increased current, and it is washing the end of the point away. This sand is being deposited at two points—in the "deep hole" and at the end of the breakwater.

## EMPLOY NO CANADIANS.

Agent Petit, of the United States Treasury Department, Port Huron, has notified owners of vessels at Marine City, St. Clair and Port Huron that if they engage Canadians on any of their boats they will be subject to a fine of \$1,000. There are a great number of American seamen living at the above ports, but their places are usually filled with Canadians, and the Secretary of the Treasury has been called on for protection. Such is the news item, but, if this feature was fairly tested, it is questionable if the ruling would hold good, as a sailor has always been permitted to ship in any class of vessel, time or place.

## BIDS FOR HARBOR WORK.

Abstract of proposals received at Duluth, Minn., in response to advertisement, for building concrete footing blocks for the superstructure for the south pier of ship canal entrance to harbor at Duluth, Minn., opened April 11, 1898, by Major Clinton B. Sears, Corps of Engineers, U. S. A.

Amount proposed to be expended on this work about \$12,000.00.

No. of bid	Name and address of bidder.	For footing blocks complete per cu. yd. of concrete.
1.	Michael Rabbitt, Toledo, O.	\$18.09
2.	Norris & Fitzgerald, Duluth, Minn.	4.47
3.	Stamsen & Blome, Chicago, Ill.	5.93
4.	Davis & Davis, Duluth, Minn.	6.74
5.	Nilson & Carlson, Duluth, Minn.	5.67
6.	Frank Campbell, Duluth, Minn.	6.90
7.	G. H. Sager, Chicago, Ill.	6.20
8.	King & Steele, Duluth, Minn.	4.95
9.	Emil Engle, and Aquila G. Osman, Duluth, Minn.	8.49
10.	Lipsett & Gregg, Sault Ste., Marie, Mich.	8.69
11.	John F. Schleunes, Duluth, Minn.	5.63

King & Steele, of Duluth, being the lowest responsible bidders will no doubt receive the contract. The Toledo bid is a very remarkable one.

## VISIBLE SUPPLY OF GRAIN

As compiled for The Marine Record, by George F. Stone, Secretary Chicago Board of Trade.

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY. Bushels.
Buffalo	703,000	1,454,000	1,129,000	165,000	94,000
Chicago	5,865,000	16,549,000	1,197,000	534,000	323,000
Detroit	68,000	156,000	7,000	18,000	1,000
Duluth and Superior	3,760,000	3,339,000	3,360,000	1,410,000	414,000
Milwaukee	104,000	104,000	1,000	76,000	2,000
Montreal	102,000	57,000	1,049,000	45,000	40,000
Oswego					
Toledo	265,000	1,169,000	316,000	12,000	
Toronto	25,000		21,000		11,000
On Canal			46,000		
Grand Total	30,129,000	40,100,000	13,540,000	3,511,000	1,337,000
Corresponding Date, 1897	37,706,000	24,967,000	13,287,000	3,622,000	2,705,000
Decrease	94,000	2,547,000			36,000

While the stock of grain at lake ports only is here given, the total shows the figures for the entire country except the Pacific Slope.

## NAVAL CONSTRUCTION.

Commodore Hichborn, chief naval constructor U. S. N. has issued a statement showing the percentage of completion of the various boats now being built for the navy. The battleships Kearsarge and Kentucky, at Newport News, are completed to the extent of 57 per cent.; the Illinois, at Newport News, 75 per cent.; the Alabama, under construction by Cramp & Sons, 46 per cent.; and the Wisconsin at the Union

Iron Works, 35 1/2 per cent. The gun-boat Princeton, under construction by Dialogue & Son, is 95 per cent., completed, and the submarine torpedo boat Plunger, building at the Columbia iron works, 70 per cent. The torpedo boat Rowan is completed to the extent of 94 per cent., Davis 78 per cent., Morris 87 per cent., Mackenzie 92 per cent., McKee 80 per cent., Dahlgren 45 per cent., Farragut 60 per cent., Fox 73 per cent., Cravan 38 per cent., and Stringham 15 per cent.

## INSPECTORS OF HULLS AND BOILERS.

The United States Civil Service Commission announces that on April 25, 1898, an examination will be held at all places throughout the United States where the Commission has competent boards of examiners, to establish an eligible register for the purpose of filling vacancies in the general steamboat inspection service, and especially two vacancies in the district of Alaska as follows: One in the position of inspector of hulls, and one in the position of inspector of boilers.

Only citizens of the United States can be examined. The age limitations for this examination are as follows: minimum 25, maximum 55 years.

The scope of this examination is indicated in sections 143 and 145 of the Manual.

This examination is open to all reputable citizens of the United States who may desire to enter the service, and who comply with the requirements, without regard to race or to political or religious affiliations. All such citizens are invited to apply. They shall be examined, graded, and certified, with entire impartiality and wholly without regard to any consideration save their ability as shown by the grade they attain in the examination.

Attention is invited to the fact that under the rules of the Steamboat Inspection Service, fixed by the Treasury Department, applicants who do not possess the following named qualifications will not be appointed under any circumstances.

Inspectors of boilers must be physically able to enter a boiler through a manhole 9 in. by 15 in., as required by section 21, Rule II, of the Board of Supervising Inspectors of Steam Vessels.

Inspectors of hulls, for seaboard ports, must have had at least 5 years' practical experience as masters or chief mates of seagoing steam vessels; while for inland ports they must have had at least 5 years' actual practical experience as masters or first-class pilots of steam vessels on inland waters. In either case, a portion of the required 5 years' experience must have been within the 7 years next preceding the date of application, which 5 years' experience must have been under United States license of the highest grade granted upon the waters upon which the applicants have been so employed. The fact that they have been so licensed must be of record in the Treasury Department.

Such inspectors must be free from the defect of color blindness.

Inspectors of boilers must have had at least five years' practical experience as first-class engineers of steam vessels; a portion of which experience must have been within the seven years next preceding the date of application, under United States license of the highest grade granted on the waters on which they have been so employed. The fact that they have been so licensed must be of record in the Treasury Department.

It is the practice of the department to appoint only legal residents of the district or sub-district in which vacancies occur. An exception, however, will be made in the district of Alaska. All persons who are legal residents of California, Oregon or Washington, and who are otherwise qualified, may be examined for positions in that district.

The Commission has experienced considerable difficulty in securing eligibles for filling vacancies in the steamboat inspection service and it is hoped that all persons who may be qualified and who desire examination for this service will at once apply.

Persons desiring to enter this examination should at once apply to the United States Civil Service Commission at Washington, D. C., for a copy of the Manual and for application blanks Forms 304 and 363, which should be properly executed and promptly returned to the Commission.

The lecture given recently by Lieut. Col. Jared A. Smith, C. E., U. S. A., in the Temple Course of lectures at Cleveland, Ohio, seems to have been the attraction of the season. The subject was apropos to current events, being "Gunpowder as a Promotor of Civilization." Our correspondent writes: "The lecture occupied nearly two hours in its delivery, but received breathless attention throughout. Col. Smith told how the use of firearms had ended feudalism by giving to the common people the means of coping with the nobility in the field, whereas before gunpowder was known, a mailed knight, protected by armor and equipped with the best weapons of the day, was equal to about eighteen common soldiers. The new condition, he declared, had gradually shortened war periods, lengthened peace periods, and reduced the number of men in the field, so that agriculture, manufacturing, commerce and the peaceful arts had flourished exceedingly. Col. Smith, in conclusion, said he thought the \$50,000,000 appropriation the greatest measure to insure peace that could have been passed. He alluded to a big gun which had been named the 'peace-maker', and said he thought that without irreverence it could be said of the makers of such implements of war, 'Blessed are the peace-makers.'" There were many warm congratulations at the close of the lecture.—Army and Navy Journal.



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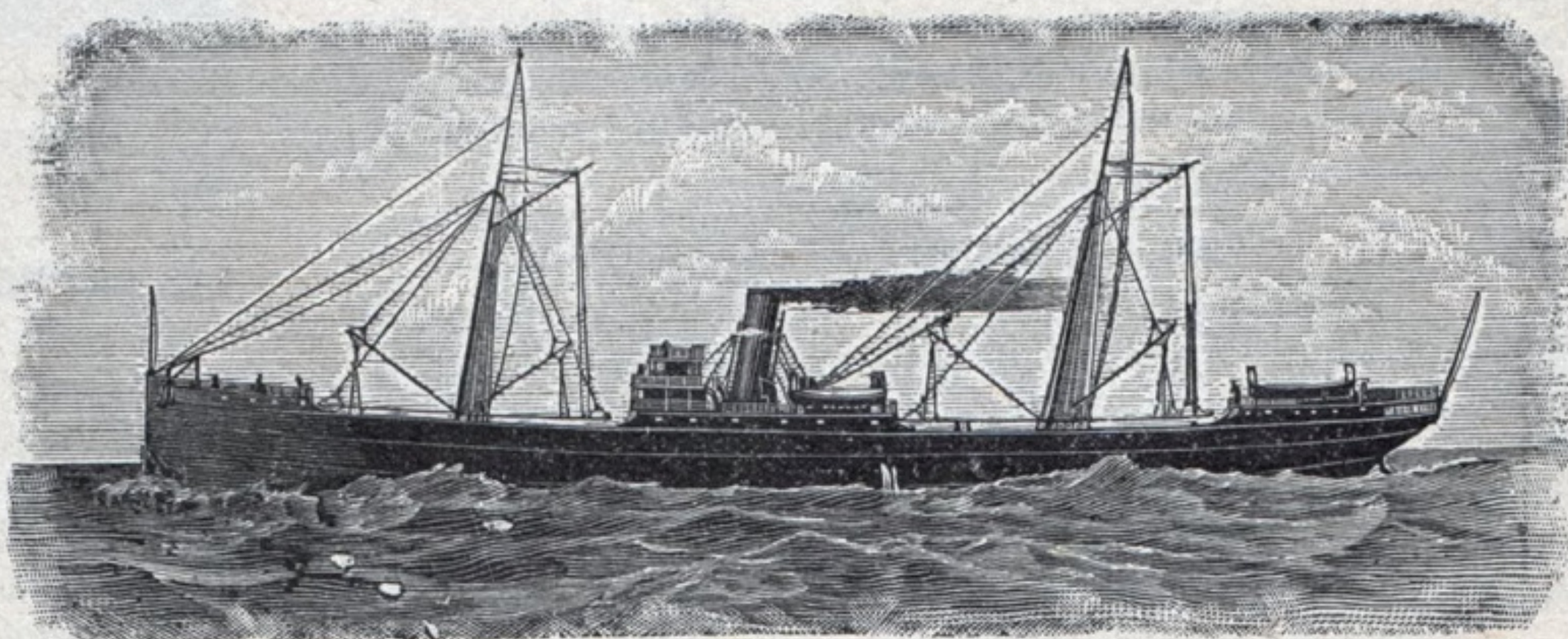
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### MARSHAL'S SALE.—THE A. D. HAYWARD.

Under commission of appraisement and sale issued out of the Exchequer Court of Canada, Toronto Admiralty District, there will be offered for sale by public auction on board the Propeller "The A. D. Hayward," now lying at Wallaceburg, at noon on Thursday, the 28th day of April, A. D., 1898, the hull, rigging and appurtenances of the Propeller "The A. D. Hayward," enrolled at Detroit, Michigan, as a United States vessel.

The engine, boilers, shafting and propeller wheel have been removed, otherwise she is complete in all respects. Classed A 1. Built at Manitowoc, Wis., in 1887. Length, 137.9 feet; breadth, 28.6 feet; depth, 10.8 feet; tonnage, 304.94.

Terms, 25 per cent. cash at time of sale. Balance within 14 days. Further terms made known at time of sale, or may be had from the undersigned.

Dated at Toronto this 12th day of April, A. D. 1898. WM. BOYD, Marshal; A. B. CARSCALLEN, Solicitor, Wallaceburg, Ont.; THOS. MULVEY, Solicitor, 2 Toronto St., Toronto. 12 April 1898.

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### NEW "SOO" RIVER RULES.

The Lake Carriers' Association, at its last annual meeting, adopted resolutions recommending that the speed limit in St. Mary's river be increased from seven to nine miles an hour and also asked that further liberties be granted for the passage of vessels in the river. Capt. A. B. Davis, in view of the Association's request, has submitted amended rules which will no doubt receive the approval of the Secretary of the Treasury. They are as follows:

**RULE I.** No vessel ascending or descending the St. Mary's river shall proceed at a greater speed than nine statute miles per hour over the ground between the turning channel gas buoy in the northern part of Mud Lake and the northern float lights in Hay Lake of the twenty-foot channel leading from Neebish channel; nor between the crib light in upper Hay Lake at the entrance of the twenty-foot channel of the Frechette and Little Rapids cut and the government pier at Sault Ste. Marie; nor between the western end of the Sault Ste. Marie canal pier and Point aux Pins lighthouse.

**RULE II.** No vessel shall pass or approach another vessel moving in the same direction nearer than a quarter of a mile between Evers Point and the northern end of the Dark Hole; nor between the first black spar buoy south of the gas buoy in the northern part of Little Mud Lake and the northern float lights in lower Hay Lake of the twenty-foot channel leading from Neebish channel; nor between the southern entrance of the twenty-foot channel of the Frechette and Little Rapids Cut and the crib light at the northern entrance of the Little Rapids cut; nor between the western end of the Sault Ste. Marie canal piers and Big Point.

**RULE III.** All vessels navigating the St. Mary's river may pass other vessels moving in the same direction between the turning channel buoy in the northern part of Mud Lake and Evers Point; in Little Mud Lake between the northern part of the Dark Hole and the first black spar buoy on the south of the gas buoy in the northern part of Little Mud Lake; between the crib light-house at the northern entrance of Little Rapids cut and the government pier at Sault Ste. Marie; and between Big Point and the light-house at Point aux Pins. No vessel passing another vessel shall move at a rate of speed greater than nine statute miles per hour over the ground.

**RULE IV.** All vessels navigating the St. Mary's river may proceed at full speed and pass other vessels moving in the same direction between Point Detour and the turning channel buoy in the northern part of Mud Lake; between the northern float lights of the 20-foot channel leading from the Neebish channel into Hay Lake and the crib light at the entrance of Frechette and Little Rapids cut. Special attention is called to rule 24 of the act of Congress approved Feb. 18, 1895, giving right of way to descending vessels in St. Mary's river.

**RULE V.** In case one steamer desires to pass another

going in the same direction on said river, at a point where such passing is permitted by these rules, the pilot of the steamer astern shall, if he intends to pass the steamer ahead on the right hand or starboard side, indicate such intention by giving one short blast of the steam whistle, and if he intends to pass such steamer ahead on the left hand or port side, he shall indicate such intention by giving two short blasts of the steam whistle. Upon the pilot of one steamer astern of another giving such signal, the pilot of the steamer ahead shall immediately answer by giving the same signal; but if he does not think it safe for the steamer astern to attempt to pass at that point, he shall immediately signify the same by giving several short and rapid blasts of the steam whistle; and under no circumstances shall the steamer astern attempt to pass the steamer ahead until such time as they have reached a point where it can be safely done, when said steamer ahead shall signify her willingness by blowing the proper signals; then the steamer ahead shall slacken to a slow rate of speed, and the steamer astern shall pass the overtaken steamer, giving the overtaken steamer as wide a berth as possible. Steamers bound in opposite directions shall slow to half speed within one quarter of a mile of each other until each has passed the other.

**RULE VI.** The patrolling vessels of the revenue cutter service shall always have the right of way over all other vessels, as indicated by the sailing signals given by any such patrolling vessel.

**RULE VII.** Three distinct blasts of the steam whistle, when sounded from a patrolling vessel, will indicate that the vessel to which such signal is given is proceeding at too high rate of speed, and such vessel must immediately moderate her speed accordingly.

**RULE VIII.** Three long blasts of the steam whistle, followed by one short blast, when sounded from a patrolling vessel, will indicate that the vessel to which such signal is given must stop until further orders from the patrolling vessel.

**RULE IX.** Two red lanterns, one above the other, hoisted on a patrolling vessel at night, will indicate to the vessel to which such signal is given that such vessel must stop and not proceed farther toward the position where such lights are displayed.

**RULE X.** No vessel or raft shall anchor in any of the improved channels now abreast of the government piers at Sault Ste. Marie, except in distress or during a fog, and any vessel so anchored must always shift her anchorage when so directed by the officer in charge of a patrolling vessel, to the spot designated by such officer.

**RULE XI.** Vessels navigating the St. Mary's river may anchor between Point Detour and Mud Lake turning buoy, and at Sailors' Encampment close to the wharves of the saw mill; in Hay Lake between the Neebish and Little Rapids channel, outside of the channel, as indicated by the ranges, but nothing in this rule shall be construed to prohibit any vessel from lying alongside any wharf in said river.

**RULE XII.** Rafts being towed in the St. Mary's river will be required to use what is termed the "old channel". From Harwood Point to Mud Lake turning buoy they will move at the time designated by the officer in charge of the patrolling vessel. When lying by they must be moored out of the channel.

**RULE XIII.** In navigating the St. Mary's river, in all cases where the forgoing rules are not applicable, the attention of masters and pilots is called to the sailing rules contained in the act of Congress of Feb. 18, 1895.

**RULE XIV.** All vessels navigating the St. Mary's river, in passing dredges and vessels at work on improvements to the channel, will be required to slacken their speed upon such dredge or other vessels engaged in such improvement giving the signal of three distinct blasts of the steam whistle.

**RULE XV.** The pilot of every steamer descending the St. Mary's river shall, when abreast of black buoy at Rains shoal, and before passing around the bend of said river at Sailors' Encampment, give a signal of one blast of the steam whistle of ten seconds duration, which signal shall be answered by a blast of the steam whistle of the same duration by any vessel ascending said river within hearing. The pilot of every steamer ascending said river, not having heard such signal from a descending steamer, shall, when abreast of Evers Point, and before passing around the bend of said river at Sailors' Encampment, give a signal of one blast of the steam whistle of ten seconds duration, which shall be answered by a blast of the steam whistle of the same duration by any vessel descending said river within hearing. After such signal of one blast of the steam whistle of ten seconds duration shall have been given and answered, the usual passing signal must be given.

**RULE XVI.** Any steamer approaching a tug towing a dredge or scow moving in the same direction may pass such tow by giving the proper signal indicating upon which side of such tow such steamer will pass, and it shall be the duty of the pilot of any such tug to sheer on the side of the channel indicated by such passing signal and give the passing steamer all possible room.

Whenever a steamer bound down the St. Mary's river in the daytime enters the Dark Hole, a white ball will be displayed on a pole at Johnson's Point, Sailors' Encampment, in said river, until the steamer is abreast of Johnson's Point, and whenever a steamer having a vessel or vessels in tow bound down in the daytime enters the Dark Hole, a red ball will be displayed under the white ball on the pole until such steamer is abreast of said point. Whenever a steamer bound down said river at night enters the Dark Hole, a white light over a red light will be displayed on said pole; and whenever a steamer bound down said river at night having a vessel or vessels in tow enters the Dark Hole, a white light with two red lights under it will be displayed on said pole. No flags or lanterns, however, will be displayed for tug boats without tows or for small boats.

For the facilitation of speed calculations in connection



with the St. Mary's river rules, the department publishes the following schedule of distances between certain points along the river, together with the time required to run those distances at a speed of 9 miles an hour:

Sections.	Distance in stat. miles.	Time in minutes.
Mud Lake buoy to Evers Point.....	2 5/8	17 1/2
Evers Point to Encampment crib light.....	3/4	5
Encampment crib light to Dark Hole turn.....	1 5/8	11
Dark Hole turn to Harwood Point turn.....	3/4	21 3/4
Harwood Point turn to junction buoy, Hay Lake.....	3/4	21 3/4
Junction buoy to upper lights, lower cut.....	2 3/4	18 1/2
Lower cut to Frechette cut.....	Full speed.	
Lower range, Frechette cut to red can buoy.....	1 1/2	10
Red can buoy to lower light, Little Rapids.....	1 1/2	10
Lower light to north entrance light-house.....	1 1/2	10
North entrance light-house to government pier.....	1 5/8	11
West end of piers to Big Point.....	2 1/4	15
Big Point to Point aux Pins light-house.....	3/4	21 2/3
Through the Dike.....	1 1/8	7 1/2
Through the Island cut.....	1 1/8	7 1/2

## LITERARY NOTICES.

The May number of Harper's Round Table will contain the first installment of Kirk Monroe's six-part serial story, "The Copper Princess." The scene is laid in the mining country of Lake Superior, and the story hinges on the mystery of a deserted copper mine. In the course of the story, as we are informed, Mr. Munroe will make his readers thoroughly acquainted with the workings of those copper mines, some of which are as much as a mile underground.

"Spun-Yarn," by Morgan Robertson. Illustrated by H. C. Edwards. New York: Harper & Bros., 1898.

Under the title of "Spun Yarn" the Harpers have collected five of Morgan Robertson's stories, and have made an attractive book of over 200 pages.

The five narratives differ greatly from each other, and prove Mr. Robertson's versatility. In the first, "The Slumber of a Soul," we are introduced to the chief mate of a blockade runner, who is hit on the head during an encounter with a gunboat, and his reason leaves him. Thirty or more years pass, and by chance he becomes cook on the same steamer, now a peaceful merchant craft. A blow on the head brings back his senses, and the mind, so long lying dormant, continues on as it left off so many years before, and from cook he assumes command of the vessel, with interesting results. The story is brilliantly and entertainingly told.

"The Survival of the Fittest" may be said to be a character study of an ignorant youth, who, using his natural instinct in the mechanical line, brings a half wrecked and unwieldy tow barge down Lake Erie and into Buffalo Creek unaided, in a living gale of wind. "A Creature of Circumstance" is a story of a Scotchman who engages in the slave trade and whose vessel is captured and the tables turned. In "Honor Among Thieves" Mr. Robertson shows his master hand, and this tale of treachery in Eastern waters is as vivid and startling in its realism as a Kipling story. "The Derelict Neptune" is one of the best of these five tales.

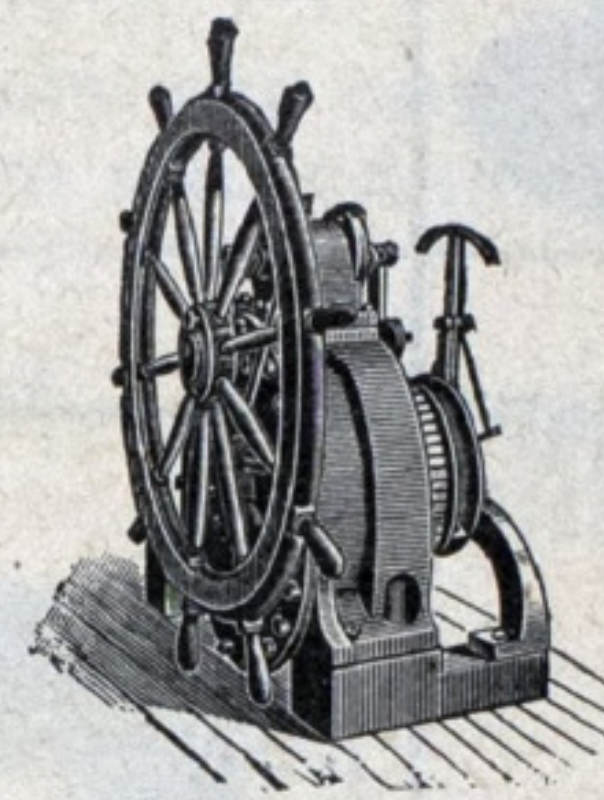
Hon. Theodore Roosevelt, assistant secretary of the Navy, has written an article for the April "Century" on "Fights Between Ironclads," with reference to their significance and priority. Mr. Roosevelt's article is supplemental to one by Claude H. Wetmore in the same number on "A Famous Sea Fight." Mr. Wetmore describes the engagement between the Chilean and Peruvian ironclads off the coast of Bolivia in 1879, when the noted turret-ship Huascar, was captured. The article is fully illustrated.

The April number of The North American Review contains: The Great Lakes and the Navy, by Lieut. J. H. Gibbons, U. S. N.; Reasons for Increasing the Army, by Lieut. G. B. Duncan, U. S. A.; The Siege of Paris and the Air Ships, by Karl Blind; Recollections of the Civil War, by Sir W. H. Russell. Also: Ireland Since '98, by John E. Red-

mond, M. P.; Frances Elizabeth Willard, by Lady Henry Somerset; Germany's Exclusion of American Fruits, by Professor J. B. Smith; State Regulation of Railways, by Harry P. Robinson; The Decay of Cobdenism in England, by John P. Young, and other articles.

THE Almy Water-Tube Boiler Co., of Providence, R. I., are building a brick addition to their works on Allen's avenue, 105 feet long by 60 feet wide, which will give them about 12,000 square feet more floor space, making the entire plant about 30,000 square feet. A new lot of machinery has been added, and more will be put in upon the completion of the addition. The increase in their business necessitated the enlarging of the works. The company's orders now in hand will last for three months to come. Among these are orders for ten steam yachts, ranging from 500 to 3,000 horse power; one for a passenger steamer of 1,000 horse-power; one for a steam barge of 400 horse-power; one for the steam grain elevator, Columbia, of New York, of 200 horse-power; one for the Millville Water Works, of Millville, Mass.; one for the Hancock Inspirator Co., of Boston. During the past three months a number of their water-tube boilers have been shipped to various parts of the country, several having been sent to the gold fields of the Yukon Valley.

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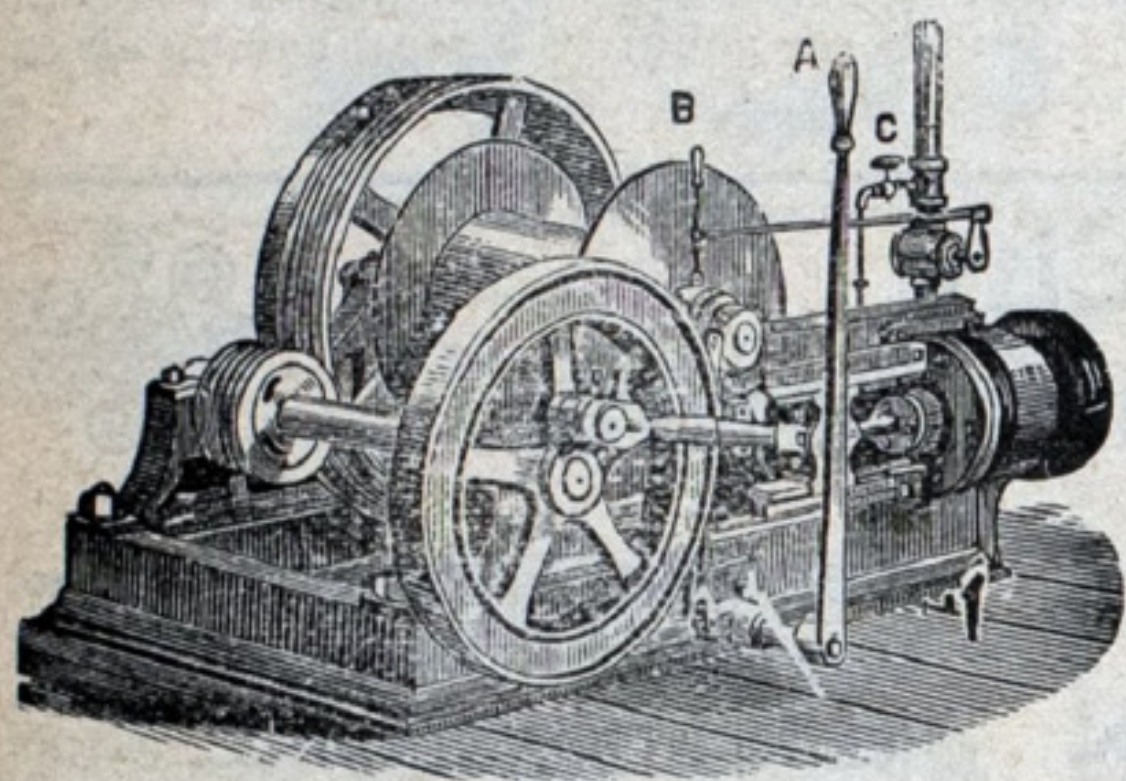




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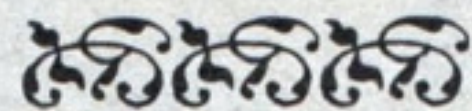
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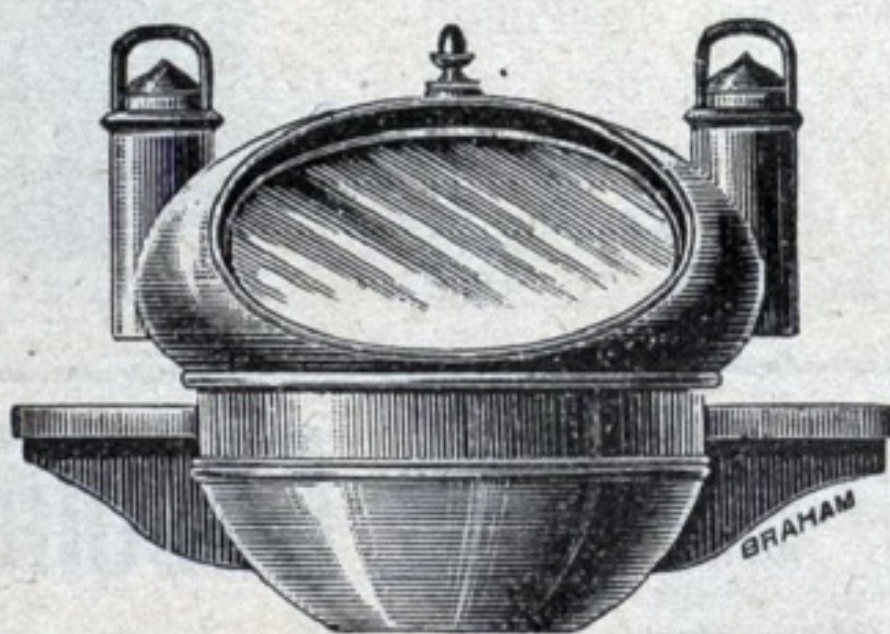


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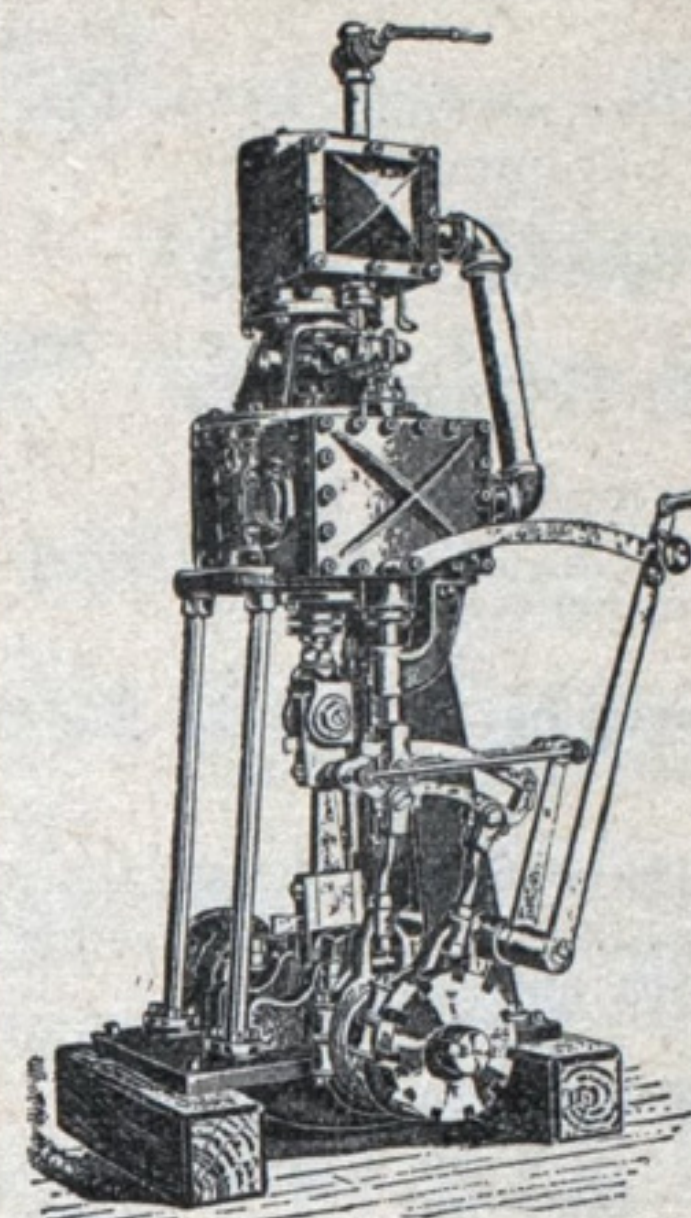
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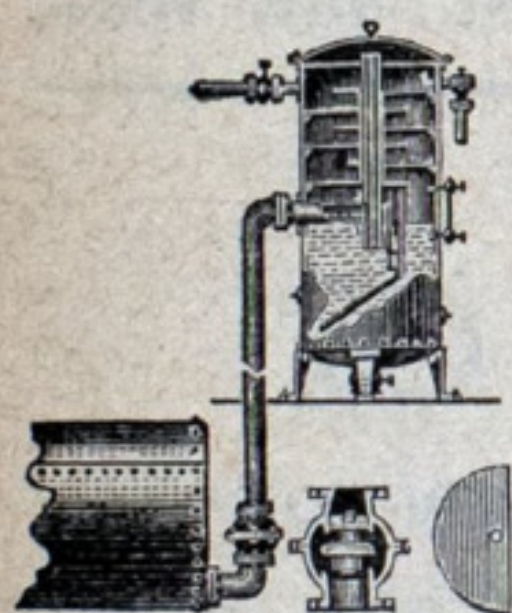
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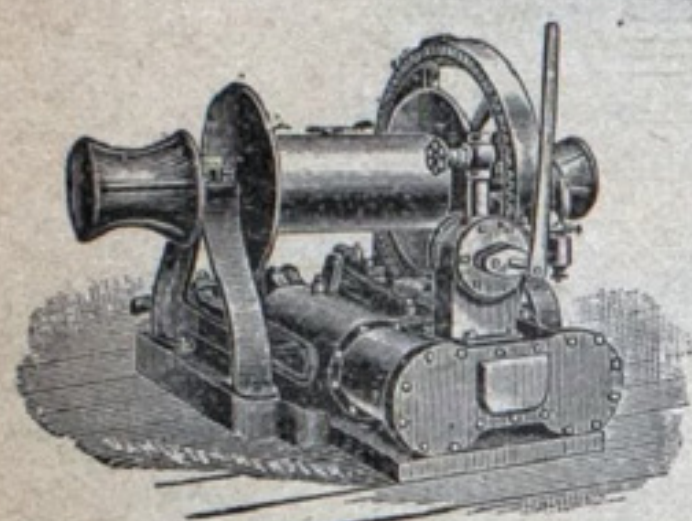
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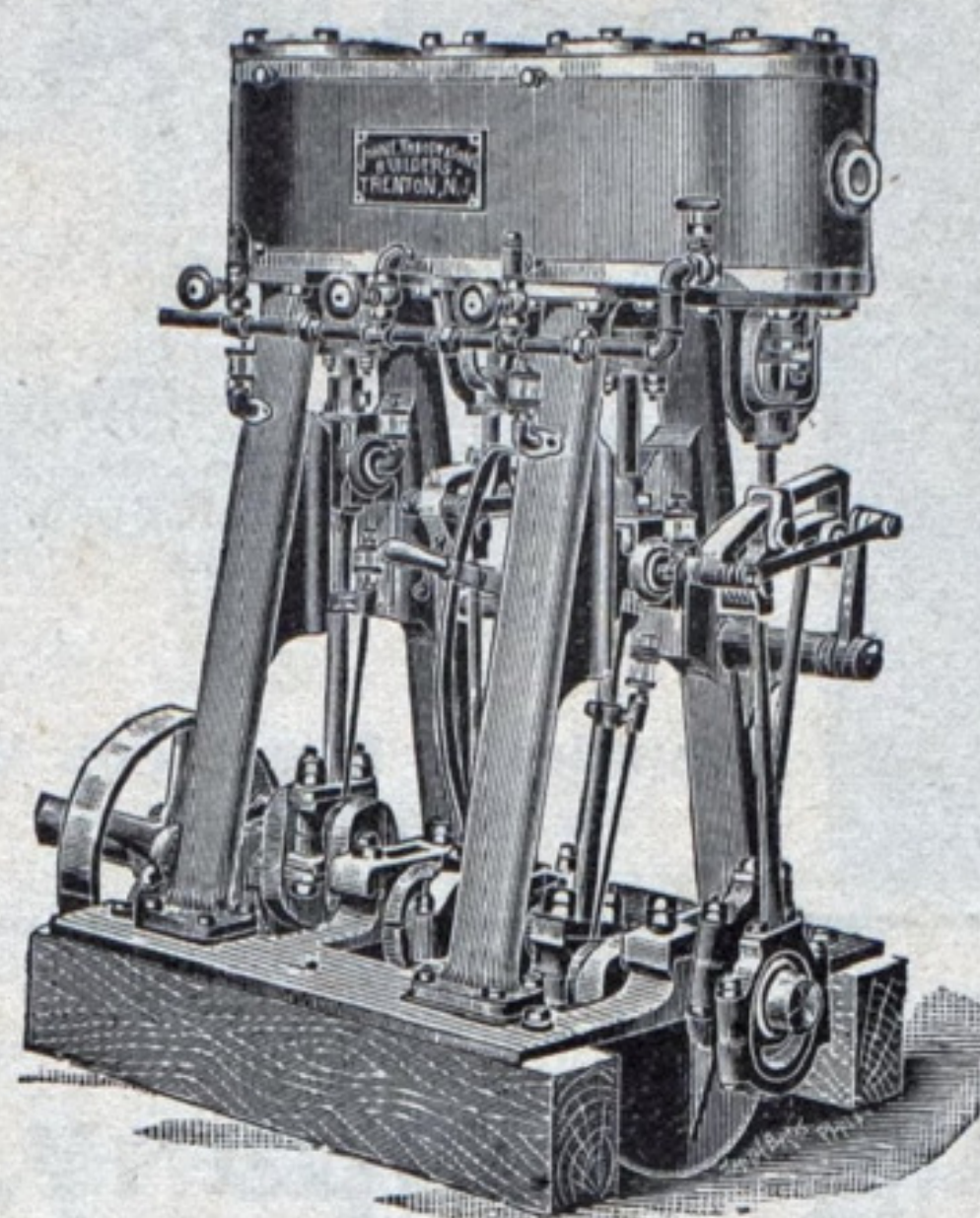
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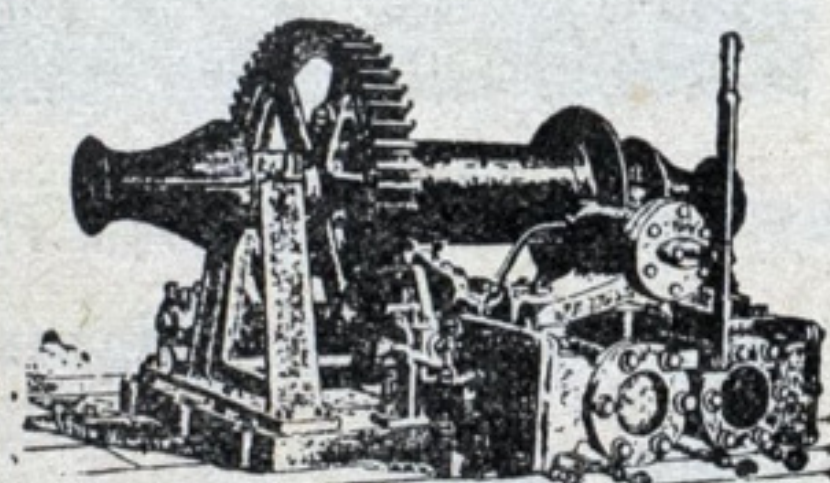
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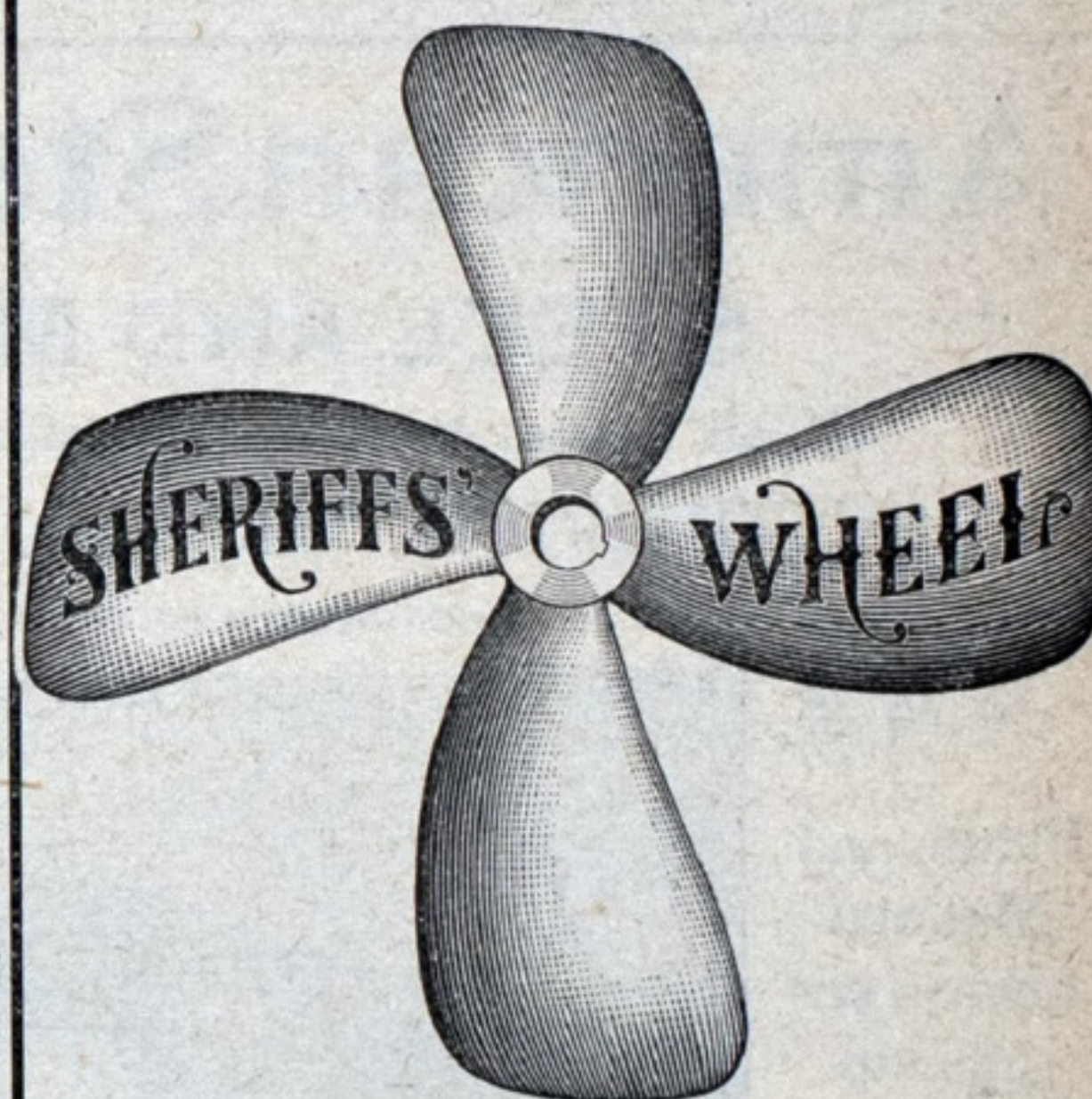
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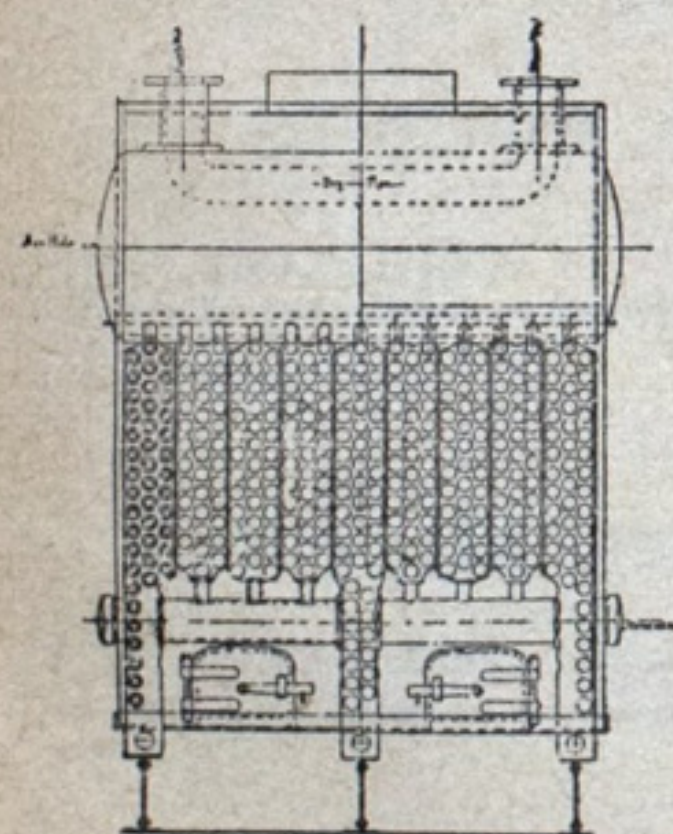
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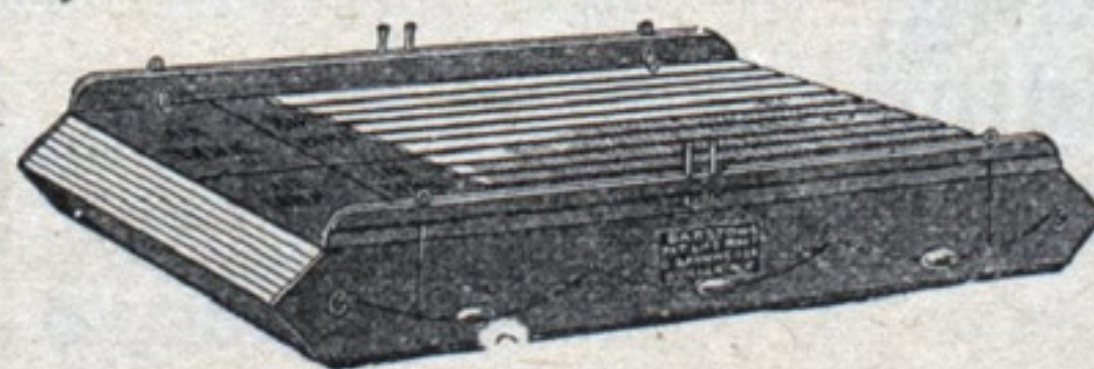
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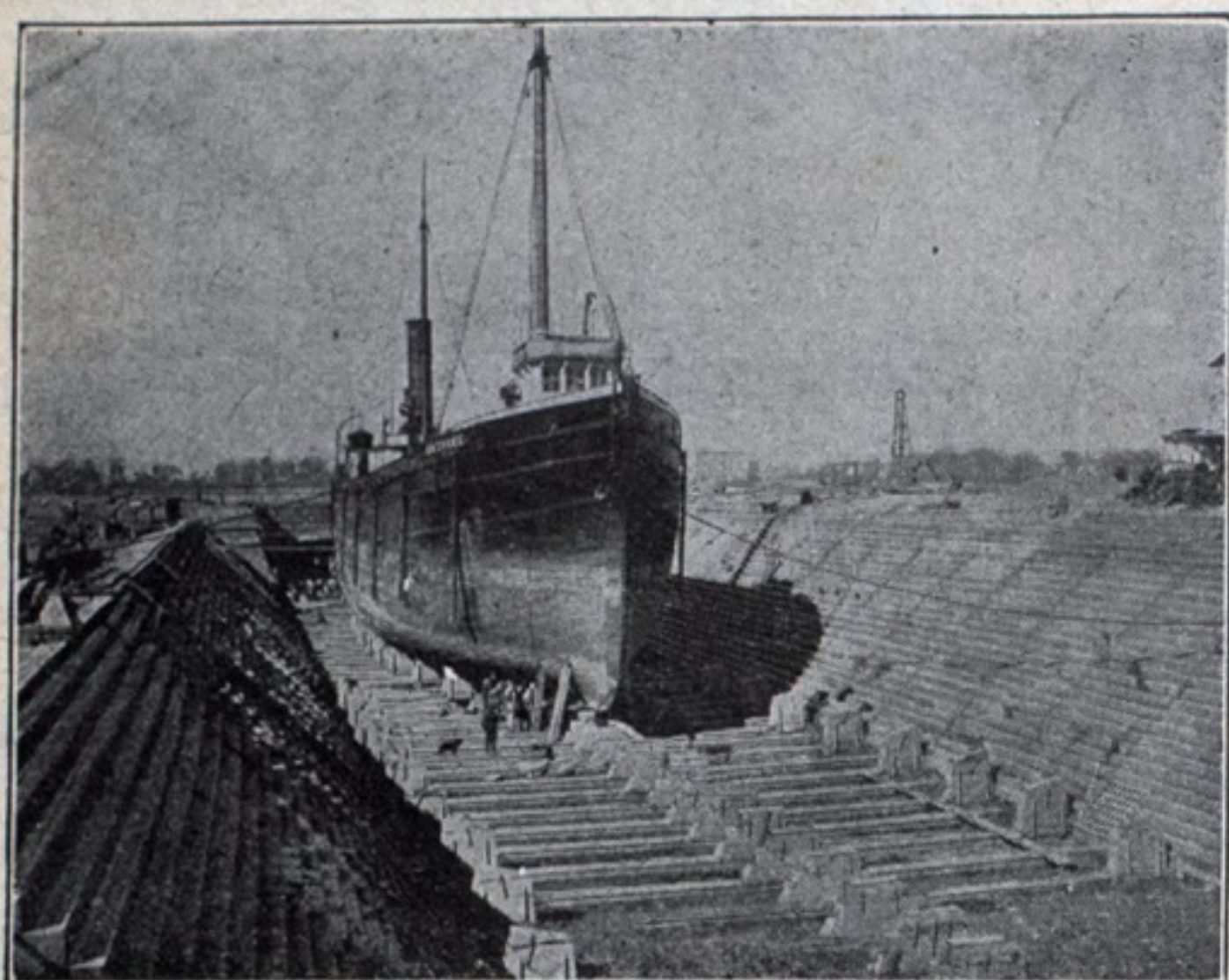


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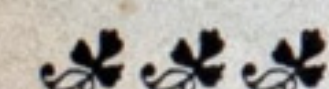
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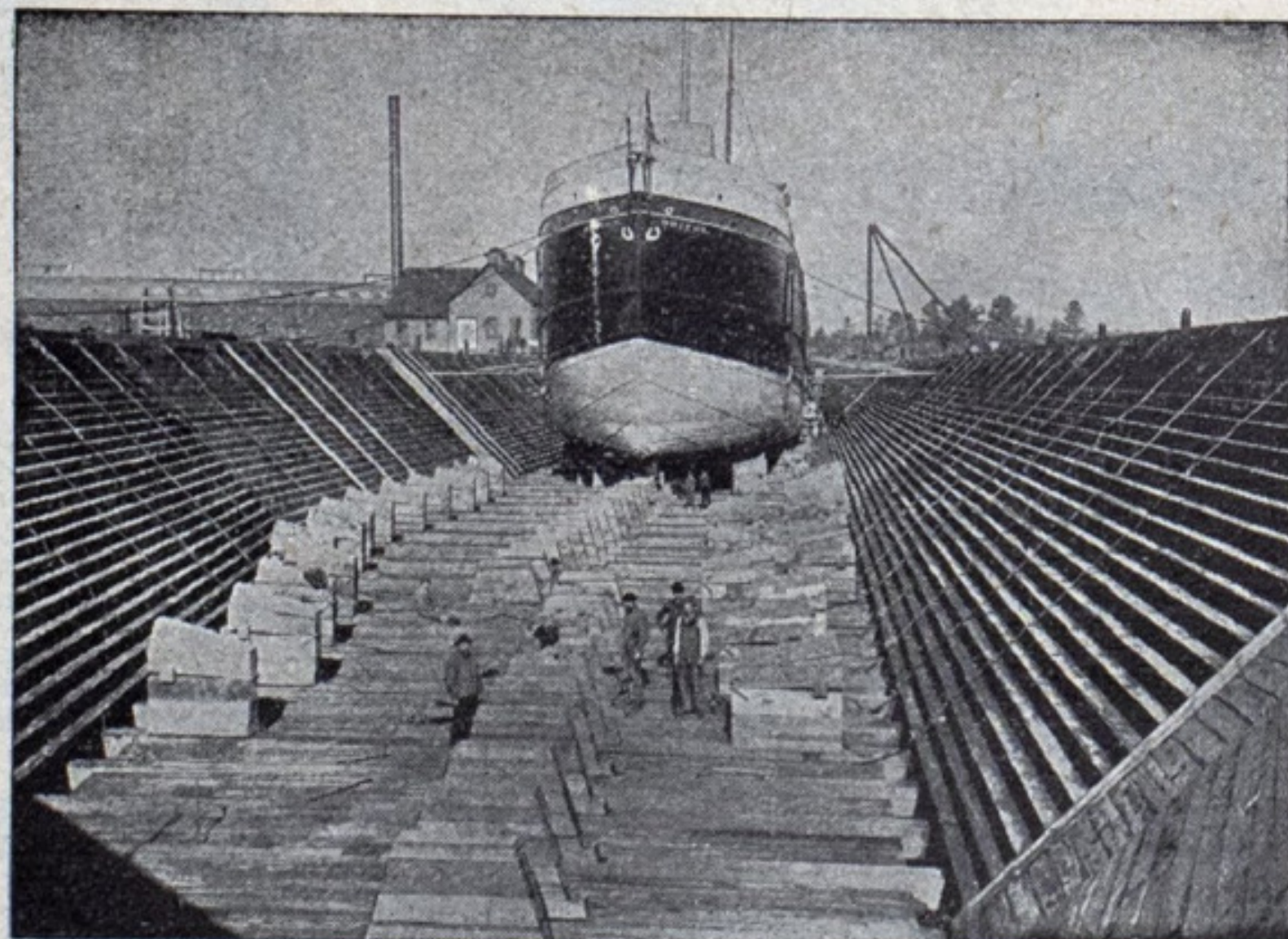
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Breadth, Bottom.....	52 "	Depth over Sills.....	18 "

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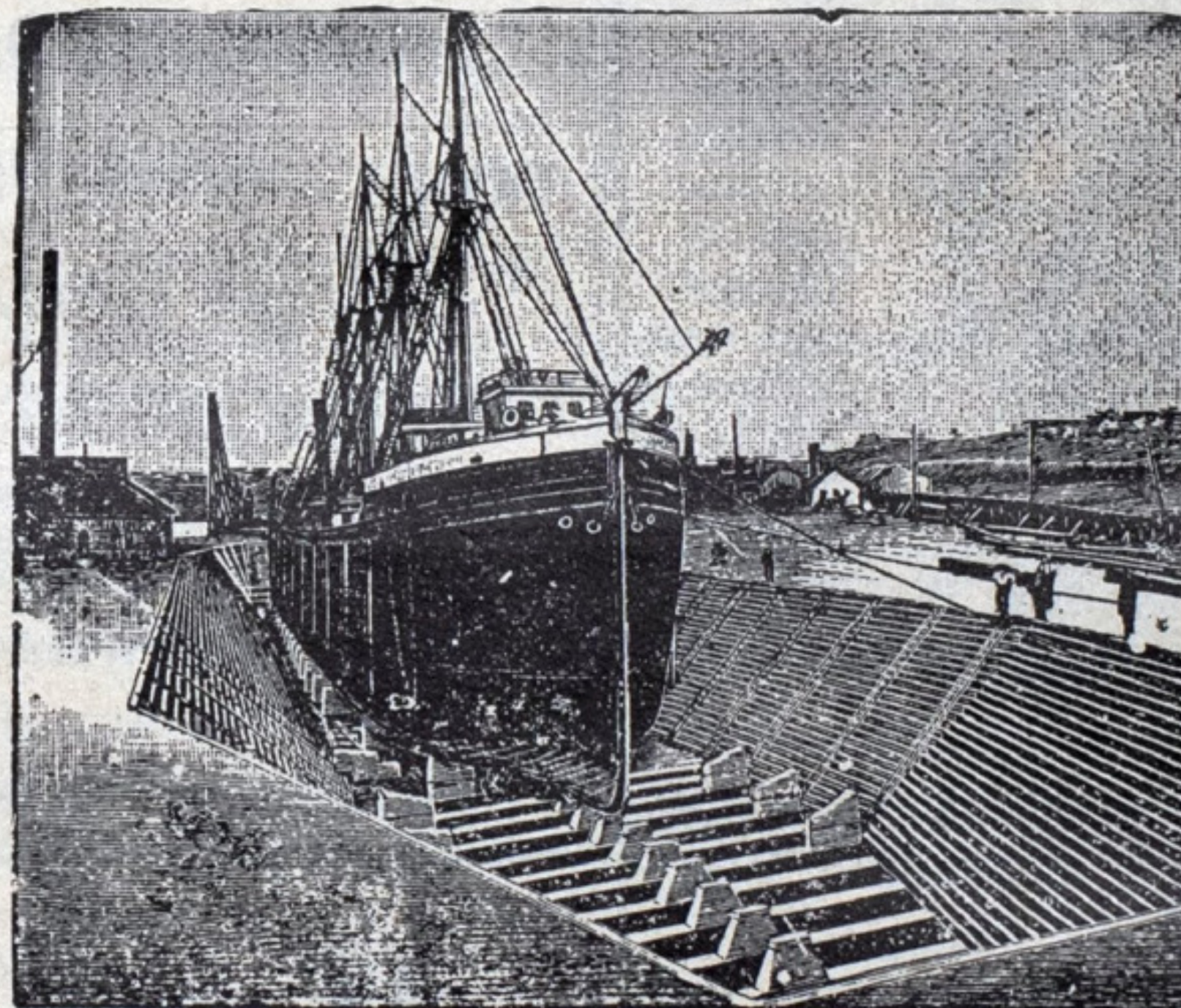
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